PROGRESS REPORT

ON

FOREST ADMINISTRATION

IN

LOWER BURMA

FOR

1888-89.

By J. W. OLIVER, Esq., and E. P. POPERT, Esq.,
CONSERVATORS OF FORESTS.

WITH A REVIEW BY THE CHIEF COMMISSIONER, AND THE ORDERS OF THE GOVERNMENT OF INDIA.

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1890.

No. 1272F., dated Simla, the 13th December 1889.

From—SIR E. C. BUCK, Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Commissioner of Burma.

I AM directed to acknowledge the receipt of your letter No. 674-32-M., dated the 23rd August last, submitting with punctuality the Report on the Forest Administration of Lower Burma for the year 1888-89, together with your resolution thereon.

2. The paucity of Civil Officers has necessarily impeded the progress of reservation, but the Government of India observes with satisfaction that considerable areas will shortly be added to the Reserves; and is glad to notice that, in view of providing a permanent supply of Cutch, steps are being taken to set aside areas as Cutch Reserves. This is very expedient. The experimental formation of Village Cutch Forests is without doubt a measure to be tried, and possibly some success may be obtained. I am to observe, however, that it is feared the interests of the villagers as private proprietors will lead them to exploit trees grown in Village Forests, at the earliest possible age, when the yield of cutch is comparatively small; and that the real solution of the important question of keeping up a constant supply of Cutch trees will probably only be found in the demarcation, whenever this can be done, of areas as State Reserves to be maintained permanently under forest.

The net increase to the area of Teak Reserves in the two Circles during the year under review was 20 square miles.

3. Boundary marks are reported to be generally in good order in the Tenasserim Circle, and in the Pegu Circle attention has been paid to repairs. It is noticed that the final demarcation of some Reserves that have been sanctioned for a considerable time, has not yet been completed, and I am to ask you to be good enough to direct the early completion of this important work.

4. The progress made in surveys during the year by the Imperial Survey Department was much the same as in the previous year, and the high rate of expenditure does not appear to have undergone any reduction. The cost of topography, exclusive of traversing and triangulation, is placed at Rs. 275 per square mile on the 4-inch scale, and at Rs. 100 on the 2-inch scale; and the year's outlay on 312 square miles completed, as against 339 square miles in the previous year, is estimated at Rs. 25,000 more than in 1887-88, notwithstanding that a smaller proportion of the work was done on the more expensive 4-inch scale.

5. In the Pegu Circle the preparation of Working-Plans continued to receive attention, and the Government of India hopes that the work in this essential branch of a sound Forest Administration will now go on without interruption. With reference to Working-Plans in the Tenasserim Circle, I am to call your attention to paragraph 5 of letter No. 1066-F, dated the 25th October 1888, to your address, reviewing the progress made during the year 1887-88, and to suggest the advisability of regular working-plans being prepared for the more important forests of the East and West Salween Divisions. The existing working-plans referred to by the Conservator are believed to be of a very rough character, and, in the opinion of the Government of India, more carefully prepared plans for suitably chosen Working Circles would considerably add to the revenue, and at the same time guarantee a more systematic protection and treatment of those Reserves which contain marketable teak. It has not been explained by the Conservator of the Tenasserim Circle why the provisions of paragraph 62 of the Forest Department Code, which prescribes the submission of

annual plans-of-operations, have not been enforced in his Circle. Where the operations to be carried out from year to year have not been laid down in carefully considered Working-Plans, it is important that the preparation of annual plans-of-operations should not be neglected.

6. The number of prosecutions was greater by 70 than in the previous year. Convictions were obtained in 88 per cent. of the cases, and this percentage, though lower than in the previous year, is sufficiently high to show that offenders are not taken to Court on insufficient evidence. In all 403 offences were compounded, Rs. 8,198 representing the compensation levied.

Fire-protection was more successful than in the previous year, and His Excellency in Council learns with satisfaction that young plantations burnt in 1887-88 have in some instances been found not to have suffered permanent injury. The Government of India is advised that any fairly well-stocked plantation will recover with more or less rapidity from the effects of a single fire, and that the more complete the stock the less liable is a plantation to permanent injury; but from the full and interesting account given by the Conservator of the Pegu Circle of the effect of the fires on plantations, it is only too clear that in many cases considerable damage, and invariably some retardation of growth, is the consequence. The view of the same officer that forest fires encourage the development of destructive borers rather than their extermination is worthy of note, and indicates the desirability of a further study of the question.

7. The area of regular plantations was increased by the addition of 21 acres to the Magayi Plantation, while teak was planted in taungya clearings to the extent of 854 acres in the Tenasserim Circle and 1,810 acres in the Pegu Circle. These satisfactory results bring the area under taungya plantations up to 16,119 acres, of which 4,678 are in the Tenasserim Circle. The area of new plantings in 1888-89 exceeded the area of new plantings in 1887-88 by 55 acres in the Tenasserim Circle and by no less than 833 acres in the Pegu Circle. The considerable expansion of taungya plantations to an area of more than 4 square miles has never before been recorded in any one year, and I am desired to record the appreciation of the Government of India of the development of this cheap means of ameliorating the State Reserves by increasing the proportion of teak in them. For the reasons given by you, teak taungyas cost less in the Tenasserim Circle than in the Pegu Circle, and it is further observed that, while maintenance is debited in the former Circle with little more than Rs. 3 an acre, the up-keep of similar plantations in the Pegu Circle costs more than Rs. 5 per acre. When once a plantation has been established at a certain cost, it is necessary to follow up the original expenditure with such outlay on weedings and thinnings as may be required in order to insure the young trees not being overgrown and killed out, and, failing any explanation to the contrary, it would appear likely that sufficient attention may not be given to this important work in the Tenasserim Circle, where indeed the Conservator reports that weedings in one division were insufficient.

8. The quantity of timber worked out of the forests, as explained in paragraph 12 of your resolution, was considerably in excess of that extracted in the previous year. The outturn from the Tenasserim Circle was greater by nearly 11,000 tons, while that from Pegu exceeded the yield of the previous year by more than 24,000 tons. Some explanation seems called for why so large a quantity of timber as 600 tons in the year under review and 900 tons in 1887-88 was disposed of in the Tenasserim Circle under the head of Free Grants. The falling off in Cutch revenue from trees outside Reserves has long been expected; and the Government of India regrets that it has hitherto been found impossible to take earlier and adequate measures to meet the time when the supply from open lands would be exhausted. The action taken by you to prevent the adulteration of cutch by the admixture of a useless product, resembling it in appearance, meets with the approval of the Government of India. Had the adulteration been allowed to go on unnoticed, it is certain that the trade with Europe would have been seriously affected.

The following statement summarises the outturn of the year :—

Class of Forests.	Outturn, in cubic feet.		Bamboos.	Minor Produce (including value of Bamboos.)
	Timber.	Fuel.		
			No.	Rs.
Reserved Forests.				
By Government Agency	748,281		...	...
„ Purchasers	512,666		1,989,550	38,738
„ Right-holders	9,950		38,900	667
Free Grants	...		...	...
Total ...	1,270,897		2,028,450	39,405
Unclassed Forests.				
By Government Agency	2,006,652		...	...
„ Purchasers	5,349,987*		...	1,17,527
„ Right-holders	67,793		...	...
Free Grants	41,950		...	...
Total ...	7,466,382		...	1,17,527
Grand Total in 1888-89 ...	8,737,279		2,028,450	1,56,932
„ „ „ 1887-88 ...	7,036,423		1,654,900	2,04,228
Increase or decrease in 1888-89 ...	+1,700,856		+373,550	—47,296

* The information is not given.

* The Conservator of the Pegu Circle gives the number of " trees and billets " extracted. The outturn in Fuel should be shown in cubic feet only, as prescribed by the Code.

9. The financial results of the year under review, giving the highest net and gross revenues on record, continue to show satisfactory progress. The Receipts and Charges compare with those of the previous year as follows :—

Circle.	Receipts.	Charges.	Surplus.	Proportion of Surplus to gross Revenue.
	Rs.	Rs.	Rs.	Per Cent.
Pegu	19,39,483	8,06,193	11,33,290	58
Tenasserim	6,69,822	3,74,529	2,95,293	44
Total in 1888-89 ...	26,09,305	11,80,722	14,28,583	55
„ 1887-88 ...	22,18,897	10,32,694	11,86,203	53
Increase in 1888-89 ...	3,90,408	1,48,028	2,42,380	2

10. The imports of foreign teak by the Irrawaddy, Salween, and Sittang rivers compare with those of the previous year as follows :—

Year.	Quantity, in Tons.		
	Pegu Circle.	Tenasserim Circle.	Total.
1888-89	75,223	135,755	210,978
1887-88	40,500	104,683	145,183
Increase in 1888-89	34,723	31,072	65,795

Exports, as explained in paragraph 16 of your resolution, compare favourably with the average of past years both as regards quantity and value.

11. The Government of India desires to record its special satisfaction at the results obtained during the year under review, and I am to express the appreciation of His Excellency the Governor General in Council of the favorable progress made in Forest Administration under Sir Charles Crosthwaite, and of the services rendered, especially in the Pegu Circle, by the Conservators and the officers serving under them.

[B. B. C.]

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RESOLUTION

ON THE

FOREST ADMINISTRATION REPORT

OF

LOWER BURMA

For the year 1888-89.

Extract from the Proceedings of the Chief Commissioner, Burma, in the Forest Department,—No. 82M., dated the 19th August 1889.

READ—

Reports of Conservators on the administration of the forests of the Tenasserim and Pegu circles for the year 1888-89.

RESOLUTION.—The report of the Tenasserim circle was received on the 25th and that of the Pegu circle on the 29th June, the due date being the 1st July. The Chief Commissioner has pleasure in acknowledging the punctual submission of these reports.

GENERAL RESULTS.

2. The work of the year and its results may be summarized as follows. The area of reserved forests was increased by 20 square miles, the total area of the reserves being at the close of the year 5,111 square miles. Fire-protection was successful over 193,672 acres compared with 137,986 acres in 1887-88. An addition of 2,664 acres was made to the area of taungya-grounds planted with teak, the total area now being 16,119 acres. The number of teak trees girdled was 15,319, or 2,453 less than in the year before. Five hundred pyinma trees were also girdled. The quantity of teak extracted from the forests was 55,975 tons, or 13,644 tons more than in 1887-88. The gross revenue of the year was Rs. 26,09,305 against Rs. 22,18,897 in that year and the expenditure was Rs. 11,80,722 compared with Rs. 10,32,694, the net forest revenue of Lower Burma being thus Rs. 14,28,583, or Rs. 2,42,380 more than in 1887-88.

RESERVATION OF FORESTS.

Reservation of forests.

3. The area of reserved forests in the Pegu circle was reduced by the exclusion of 1 square mile, which was deforested in the interests of the Irrawaddy Valley State Railway. Twenty-one square miles were added to the reserved area, the net result being an increase of only 20 square miles. The total area of reserves in this circle at the close of the year was 3,318 square miles. To this area over 400 square miles will probably be added in 1889-90. In Tenasserim circle no new reserves were added to the previous area of 1,793 square miles. Proposals were under consideration for the formation of two reserves in the Shwegyin and Amherst districts, of which one, the Kyakatchaung reserve of 28 square miles, has been sanctioned during the current year. The lack of Civil Officers to undertake forest settlement operations interferes with the progress of reservation in both circles.

Cutch reserves.

4. The need of measures for the preservation of cutch has long been apparent. The subject is now being forced into prominence by the exhaustion of almost all the cutch-producing areas in the Prome district and the Myedè township of the Thayetmyo district except the reserves, while during the past season even the reserves have had to be thrown open to provide for a number of persons engaged in cutch manufacture who would otherwise have been left without employment. To provide a constant supply of cutch is a problem of much difficulty. In Myedè there are strong local objections to the extension of areas of reserved forests; and the experiment of constituting village forests for the purpose of securing cutch from overworking is about to be tried. Areas for these village forests were selected and demarcated during the past season. At the same time it is proposed to reserve suitable areas as cutch reserves in the Sinbaungwè township, which now forms part of the Thayetmyo district, and preliminary proposals for the reservation of an area of 15 square miles have already been sanctioned. The result of the experiment of the formation of village cutch forests will be watched with interest.

Forest surveys.

5. The work of the topographical survey party, which has for some years been engaged principally on the surveys of the reserved forests in the Pegu circle, consisted of the detail survey of 150·38 square miles inside reserves including the proposed Pyuchaung reserve (about 80 square miles). Of the area so surveyed 15·57 square miles were Karen taungya area. In unreserved forest the detail survey of 162·3 square miles was completed. Besides this 350 square miles of traverse survey work was done and this area is now ready for the detail surveyors. About 62 square miles of the traversed area are in the Toungoo district. The party worked in the Prome, Thayetmyo, and Toungoo districts. It is reckoned that three more seasons will be required to finish the detail survey up to the old frontier.

In the Tenasserim circle no regular forest surveys have yet been undertaken. The preliminary demarcation of the more valuable of the small outlying teak tracts in the valley of the Attaran river was in progress during the year. The area of these tracts is about 5 square miles.

Working Plans.

Working plans.

6. Working plans for the Minhla and Gamôn working circles in the Tharrawaddy division were prepared. Soon after the close of the year they were sanctioned by the Chief Commissioner after approval by the Inspector-General of Forests. They provide for the extraction for a period of 35 years of 500 teak trees, or about 720 tons of timber, a year from the former, and of 1,000 teak trees, or about 1,700 tons of timber, a year from the latter, giving an estimated net annual revenue of Rs. 19,000 and Rs. 45,000 respectively. Considerable progress was also made towards the preparation of working plans for three other reserves in the Tharrawaddy division. In the Tenasserim circle no working plans were prepared.

Offences against Forest Rules.

Forest offences.

7. There were no reports of offences within the Tenasserim reserved forests, but 201 cases of breach of rules or of theft were disposed of, 211 persons being convicted, compared with

162 cases and 151 convictions in 1887-88. Sixty-four other cases were compounded by Forest Officers against 108 in that year. Two men employed on the temporary Kado staff were sentenced to imprisonment for using a forged hammer-mark. In the Pegu circle 171 cases were prosecuted, or 38 more than in the previous year, and convictions were obtained in 145 cases. Many cases were compounded, the department receiving Rs. 6,825 as compensation. There was much undetected theft of cutch trees, due to the negligence of the temporary forest employés in charge.

Protection of Reserves.

Forest fires and fire-protection.

8. The dry season of 1888-89 was again protracted, but fire-protection was more successfully carried out than in the previous year. The following table shows the actual and comparative results of the measures taken for protecting the reserves from fire during the past two years:—

Circle.	Area in square miles.			Proportion of failures to area attempted.	Cost.		Proportion of area under fire-protection to total area of reserves (excluding taungyas).
	Attempted.	Failures.	Protected.		Per square mile protected.	Per acre protected.	
				Per cent.	Rs. A. P.	Rs. A. P.	Per cent.
Pegu ...	218	30	188	13·81	65 1 1	0 1 7	7·50
Tenasserim ...	124	9	115	7·33	48 5 0	0 1 1	6·94
Total in 1888-89 .	342	39	303	11·47	56 13 0	0 1 5	7·29
Total in 1887-88 ...	309	94	215	30·25	66 15 0	0 1 8	6·62
Increase or decrease in 1888-89.	+33	—55	+88	—18·78	—10 1 4	—0 0 3	+ ·67

The Tenasserim forests suffered but little from fire in comparison with the extent of damage done in 1887-88. The measures adopted were effectual over 73,318 acres out of 79,116 acres at a cost of 1 anna 1 pie per acre protected. In the previous year only 53,599 acres out of 79,056 acres were protected at a cost of 1 anna 2 pies an acre. In two reserves fires broke out three times. Only trifling damage was done in one case; but in the other, the Bilakatky reserve, the injury done was serious. Mr. Hauxwell and his subordinates deserve commendation for their successful fire-protection in the East Salween division. It is satisfactory to learn that, except in the Mèpalè reserve, the young plantations burnt last year have not been found on inspection to have suffered severe permanent injury. In the Pegu circle also fire-protection was much more successful than in 1887-88, 120,314 acres out of 139,592 acres having escaped being burnt, at an outlay of 1 anna 7 pies per acre protected. In the year 1887-88 only 84,387 acres escaped out of 118,779 acres attempted, the expenditure amounting to Rs. 10,461, or 2 annas per acre protected. The fires in the year under review although many in number were for the most part of small individual extent. They were due in many cases to wilful mischief. The Conservator has given full and interesting details of the effects of the fires of last year on the young plantations of his circle. Though in some cases little or no permanent damage was caused, in several instances, especially in the

Kôngyi, Minhla, Môkka, and Kadin-Bilin and Kun-Bilin reserves, the plantations suffered serious injury. It is satisfactory to note that the area of plantations burnt was only 1,794 acres as compared with 4,322 acres in the previous year. In only one case is it recorded that the villagers assisted in putting out a forest fire.

Reproduction and Improvement of Forest Growth.

Teak plantations

9. No regular teak plantations were formed in the Tenasserim circle. In the Pegu circle 21 acres were added to the Magayi plantation at a cost of Rs. 14-6-4 per acre. The plants are thriving. The teak plantations of the circle now cover 3,845 acres.

Taungya teak-cultivation.

10. The cultivation of teak in taungyas continues to extend. In Tenasserim 854 acres were planted up with teak during the year, with good results over nearly the whole of this area. The taungya teak plantations of the circle now cover 4,678 acres. In the Pegu circle 1,810 acres were added to the taungya teak area during the year. There was a slight admixture of cutch. The total area is now 11,441 acres, a result achieved at an average cost (exclusive of subsequent maintenance) of Rs. 9-13-6 per acre. This rate is high, however, in comparison with the cost of similar reproduction in the Tenasserim circle, where the average original cost per acre was only Rs. 4-1-5. This difference in cost is, however, capable of explanation. Payment is made by results at the rate of Re. 1 per 100 seedlings reared. In Pegu the plantations are as a rule better stocked than those in Tenasserim, the average number of plants per acre in the latter being 618, while in Pegu the average was 874. Besides this a bonus was paid for several years to the Karens in the case of some of the older taungya plantations in Pegu for keeping fire out of them. This outlay is included in the cost of the plantations.

Girdling Operations.

Girdling operations.

11. In the Tenasserim circle 995 teak trees were girdled in the Gawle reserve in the East Salween division besides 500 pyinma trees in unreserved forest elsewhere. In Pegu 4,493 teak trees were girdled inside reserves out of a proposed girdling of 5,187 and 9,831 trees outside reserves against a proposed girdling of 9,813 trees.

Timber worked out of the Forests.

12. The quantity of timber, including other kinds than teak, worked out of British forests during the year was as follows :—

	Teak.	Other kinds.	Total.
	Tons	Tons.	Tons.
By Government agency	53,236	1,862	55,098
By purchasers and under trade permits	1,441	115,813	117,254
Under free permits	124	715	839
By leaseholders of forests	1,174	881	1,555
Total ...	55,975	118,771	174,746
Total for 1887-88 ...	42,331	98,529	140,860
Increase or decrease in 1888-89 ...	+13,644	+20,242	+33,886

In the Tenasserim circle 12,801 tons of teak timber were extracted, or 2,245 tons more than in 1887-88. Besides this a large quantity of teak was on its

way to, but had not reached, the depôt when the year closed. Of other kinds of timber 4,627 tons of reserved and 18,937 tons of unreserved sorts were also extracted compared with 3,037 tons and 12,051 tons respectively in the previous year. The outturn of teak in the Pegu circle was 43,174 tons against 30,700 tons in 1887-88 and would have been larger had there not been much timber neaped *en route* to Rangoon owing to the early closing of the rains. The actual increase is chiefly due to the extraction of paddy-field teak. Of other reserved kinds of timber 4,144 tons were extracted, or 1,358 tons more than in the year before. Of unreserved kinds 91,063 tons were extracted by purchasers compared with 80,644 tons in that year, when the outturn was nearly double that of 1886-87. There was a serious decrease in the quantity of cutch extracted, the revenue from cutch in the Pegu circle amounting to Rs. 1,47,003 as compared with Rs. 1,95,811 in the previous year. The realizations on cutch extracted from reserves were higher than in 1887-88. The falling off was in the extraction of cutch outside reserves. As already noted cutch shows signs of being exhausted outside reserves. During the year attention was drawn to the practice of adulterating cutch with *than-sha*. The *than* tree yields a product closely resembling cutch, but without any of the properties which give cutch its commercial value. In order to stop the practice referred to, *than* was declared a reserved tree in Lower Burma.

Revenue and Expenditure.

13. The gross forest revenue of the year amounted to Rs. 26,09,305, or Rs. 3,90,408 more than in 1887-88, the details for the two years being as follows :—

		1887-88	1888-89.	Increase or decrease.
		Rs.	Rs.	Rs.
From timber and other produce removed from the forests by Government agency.		16,26,722	19,87,990	+ 3,61,268
From timber and other produce removed from the forests by consumers or purchasers.	Timber	1,77,239	2,33,967	+ 56,728
	Firewood and charcoal ..	7,928	18,862	+ 10,934
	Bamboos	4,041	4,974	+ 933
	Grazing and fodder grass . .	236	223	— 13
	Other minor produce .	1,99,076	1,51,070	— 48 006
Confiscated drift and waif wood		1,30,744	1,34,537	+ 3,793
Duty on foreign timber and other foreign produce		32,060	41,252	+ 9,192
Miscellaneous		40,851	36,430	— 4,421
Total ...		22,18,897	26,09,305	+ 3,90,408

14. In the Tenasserim circle the receipts from timber worked out by Government were over a lakh of rupees more than in the year before, the quantity of timber brought to depôt being greater and the quality better, while prices also rose as the year advanced. The same causes, coupled with larger clearances from Kado just before the close of the year to avoid the 7 per cent. *ad valorem* duty, which came into force on the 1st April 1889, account for the increase of Rs. 12,746 in the duty received on foreign timber at Kado. Under other heads there is nothing calling for remark. The gross revenue of the Pegu circle in 1888-89 was Rs. 19,39,483. Sales of Government timber during the year of report realized Rs. 2,48,691 more than in 1887-88, notwithstanding the fact that markets, both local and foreign, were dull for many months.

15. The total expenditure of the year amounted to Rs. 11,80,722, or Rs. 1,48,028 more than in 1887-88. In Tenasserim the excess was Rs. 45,155, of which nearly the whole was due to the same causes that account for the increased revenue. The expenditure in the Pegu circle was Rs. 1,02,873 over that of 1887-88, and is in proportion to the revenue and necessities of the year. The net surplus in the Tenasserim circle was Rs. 2,95,293 and in the Pegu circle Rs. 11,33,290 compared with Rs. 2,14,429 and Rs. 9,71,774 in 1887-88.

The net total surplus for the two circles is Rs. 2,87,582 in excess of the revised estimate sanctioned by the Government of India.

Imports and Exports of Teak.

16. The quantity of teak timber imported by the Salween and entered at the Kado revenue station during the year was 135,755 tons, or 31,072 tons more than in 1887-88 and 5,193 tons less than in 1886-87. By the Irrawaddy and Sittang rivers about 75,223 tons were imported into the Pegu circle as against 40,500 tons in the preceding year.

The quantity of teak exported from Moulmein and Rangoon during each of the past four years is shown in the following statement:—

Year.	From Moulmein.		From Rangoon.		Total.		
	Tons.	Value.	Tons.	Value.	Tons	Value.	Average value per ton
		Rs		Rs		Rs	Rs
1885-86 ...	105,240	88,09,160	63,368	58,72,330	168,608	1,36,81,490	81·1
1886-87 ...	96,600	62,34,972	46,734	34,66,561	143,334	97,01,533	67·7
1887-88 ...	116,507	79,54,812	52,417	36,99,610	168,924	1,16,54,422	69·0
1888-89 ...	93,465	77,21,819	62,969	48,99,547	156,434	1,26,21,366	80·7

Much less timber was sent from Moulmein to Madras and Bombay than in 1887-88, but the shipments to these places from Rangoon rose considerably. About 19,000 tons more teak was sent to England than in 1887-88, partly to replenish decreased stocks there, and partly to meet the requirements of the Admiralty and the demands of several foreign Governments.

17. The Chief Commissioner acknowledges the good service rendered by the Conservators and the officers serving under them in the efficient administration of the forests of Lower Burma during the year.

Services of officers.

By order of the Chief Commissioner,

H. THIRKELL WHITE,

Officiating Chief Secretary.

REPORT

ON

FOREST ADMINISTRATION

IN

THE TENASSERIM CIRCLE

For the year 1888-89,

BY

J. W. OLIVER, Esq., Offg. Conservator of Forests.

CHAPTER I.

Area and Boundaries.

1.—Area.

No increase to reserved forests.

1. No addition has been made to the area of reserved forests, which remains as before at 1,793 square miles. The proposed reservation of 13 square miles in the Martaban hills and of two small tracts at Kyunbin Sakan and on the Upper Salween did not meet with the approval of the Chief Commissioner, and has been abandoned.

Forest settlement work.

2. The Kyakatchaung proposed reserve in the Shwegyin district was visited by the Deputy Commissioner as Forest Settlement Officer and its reservation, subject to certain modifications, recommended.

The papers relating to the reservation of five padauk tracts, aggregating 52 square miles, on the Upper Haungtharaw in the Amherst district were at the end of the year referred back to the Forest Department by the Deputy Commissioner for further report.

2.—Boundaries.

Inspection of boundaries and repairs.

3. Boundary marks round reserves are reported generally in good order.

In the Attaran division the demarcation with boards of the Yèchaung reserve was completed, the amount spent during the year being Rs. 204-9-0.

In the East Salween division a commencement was made towards supplementing the boards with more permanent marks, 84 posts on mounds of earth or heaps of stones having being erected at salient points round the different reserves, and in other places missing boards were replaced, the total cost being Rs. 177-13-0.

In the West Salween division boards were renewed wherever necessary round the Kahilu and Sinswè reserves.

In the South Tenasserim division all boundaries were inspected and new boards put up where required, the cost being Rs. 123-14-1.

CHAPTER II.

Surveys, Working Plans, and Annual Plans of Operations.

1.—Surveys and Exploration of Forests.

Preliminary demarcation of outlying teak tracts in Attaran valley.

4. Mr. Ferrars was engaged during the latter part of the season on the preliminary demarcation of the outlying teak tracts in the Attaran valley, but the work was not completed at the close of the year.

5. In South Tenasserim the Divisional Officer inspected most of the principal kanyin tracts in the Mergui district. A special report will be submitted on this subject as the Deputy Commissioner has recommended a modification in the conditions under which licenses to collect wood-oil are issued.

Examination of Mergui kanyin forests.

2.—*Working Plans.*

6. The provisions of the rough working plans for the East and West Salween divisions have been adhered to. No new working plans were drawn up, nor were any valuation surveys undertaken.

Existing working plans adhered to.

3.—*Annual Plans of Operations.*

7. Except for the South Tenasserim division no plans of operations were prepared for the year under report, but Divisional Officers have generally worked up to the provisions of their budget estimates.

Annual plans of operations.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

1. *Establishments.*

8. No gazetted officer was available for the West Salween division, which remained throughout the year in charge of a Forest Ranger under the general supervision of the Conservator.

No Divisional Officer available for West Salween.

9. In the East Salween division it was found impossible to get men to act as forest guards and in consequence the posts of three guards on Rs. 14 and two on Rs. 12 each were abolished, and in their place one forester on Rs. 25 and two on Rs. 20 were appointed.

Changes in scale of subordinate establishment.

The distribution and cost of the permanent and temporary subordinate establishments is shown below.

Division.	1887-88.		1888-89.			
	Cost of permanent establishments.	Cost of temporary establishments.	Sanctioned permanent establishments.	Sanctioned temporary establishments.	Actual cost of permanent establishments.	Actual cost of temporary establishments.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Attaran and agency ...	11,127	1,904	11,865	2,244	10,133	1,519
East Salween ...	2,272	883	4,458	648	3,658	495
West Salween ...	2,005	427	2,886	828	2,466	888
Kado	13,048	11,020	13,085	11,184	12,854	10,118
South Tenasserim ...	4,155	240	4,668	240	4,490	240
Total ...	32,607	15,974	36,912	15,144	33,601	12,710

2.—*General Protection and Breaches of Forest Laws.*

10. No offences are reported to have been committed within reserved forests.

Prosecution for breaches of forest law.

For breach of forest rules and theft of timber in transit 201 cases, involving 237 persons, were prosecuted before Magistrates with the result that 211

persons were convicted and 26 acquitted. Nearly the whole of these occurred in the Kado and Attaran divisions, 160 cases being disposed of by the Deputy Conservator, Kado division, acting in his capacity as a Magistrate of the 2nd class. None of this officer's decisions were reversed on appeal.

In the most important case two members of the temporary establishment at Kado, E Kaing and Nga Lin, were the defendants. They were found using a forged hammer-mark and were respectively sentenced by the Magistrate to five years and two years' rigorous imprisonment.

Cases compounded by Divisional Officers under section 66.

11. Sixty-four cases, involving as many persons, were dealt with by Divisional Officers under section 66 of the Forest Act, Rs. 1,373 being accepted as compensation. The amount paid to informers under Rule 44 was Rs. 492-7-0.

3.—Fire-protection.

General results of fire-protection.

12. Notwithstanding a somewhat protracted dry season fire-protection has been fairly successful, 73,318 acres having been saved out of an area of 79,116 acres attempted to be protected.

The total cost amounted to Rs. 4,981, or 1 anna per acre attempted and 1 anna 1 pie per acre actually protected. In the previous year the area protected was 53,599 acres out of 79,056 attempted, and the cost 10 pies per acre attempted and 1 anna 2 pies per acre protected.

Fire-protection in the Attaran division.

13. In the Attaran division three fires occurred in the Dali reserve, where the plantations only are traced. The fire ran through 10 acres comprising three yas planted in 1879, 1883, and 1886. As far as can be judged at present but little damage has been done. All these fires crossed from outside and were due to negligence on the part of the forest guard and watchers.

The whole of the Natchaung reserve (1,800 acres) was burnt through on the 17th April. The fire-trace runs along the high road and the fire is supposed to have been lighted by travellers. No assistance could be obtained from the neighbouring villagers, who were occupied in keeping the fire out of their own orange gardens. There are no plantations in this reserve.

In the Kyunchaung reserve about 500 acres north of the Kyun chaung, where there are no plantations, were burnt. The origin of the fire was not traced.

The expenditure in the Attaran division amounted to Rs. 839, or 1 anna per acre attempted and 1 anna 3 pies per acre protected.

Fire-protection in the East Salween division.

14. In the East Salween division the protection of the West Mèpalè reserve (25,600 acres), was completely successful, the cost being Rs. 1,913-8-2, or 1 anna 2 pies per acre.

Fire protection in the West Salween division.

15. In the West Salween division 45 acres were burnt in the Mèwaing reserve, including 9 acres of taungya planted in 1883. The damage done is reported to be but slight.

In the Ônkagyi reserve 20 acres were burnt through, but all the plantations escaped.

In the Bilakatkyi reserve three fires occurred, in which 3,368 acres were burnt, including 21 acres of the older taungya plantations. In the Tagèlaung reserve, where plantation work has not yet been commenced, there were two fires, which ran through 55 acres of forest. The causes of these fires remained undiscovered.

The reserves are protected by local Karens at a very trifling cost and it is impossible to exercise much supervision over them. The Sinswè, Wamu, Kahilu, and Mènanwè reserves escaped fire.

The expenditure in the West Salween division amounted to Rs. 2,229, or 10 pies per acre attempted and 11 pies per acre protected.

Comparison of fires with previous year.

16. The area of plantations and forests burnt over compared with last year is given below.

Division.	Reserve.	Area fire-traced in acres.		Area over which fire spread.			
				1887-88.	1888-89.		
		1887-88.	1888-89.	Total.	Total.	Of forest.	Of plantations.
West Salween	Sinswè ...	8,960	8,960	495	...	...	...
	Wamu ...	1,920	1,920	20	...	...	...
	Kahilu ...	2,560	2,560	...	...	..	...
	Mèwaing ...	7,360	7,360	200	45	36	9
	Mènanwè ...	3,840	3,840	..	...	...	.
	Ônkagyi ...	6,300	6,300	5,990	20	20	..
	Bilakatkyi ...	6,656	6,656	3,998	3,868	3,847	21
	Tagèlaung ...	3,072	3,072	3,032	55	55	.
East Salween ...	West Mèpalè ...	25,600	25,600	5,958	...	...	..
Attaran	Kyunchaung ...	10,880	10,880	5,760	500	500	
	Dhli ...	108	151	9	10	...	10
	Natchaung ...	1,800	1,800	...	1,800	1,800	...
	Gôngyi ...	...	17	...	...	...	...
	Total ...	79,056	79,116	25,457	5,798	5,758	40

17. The plantations burnt through in the previous year have all been inspected. No very serious damage has been done except in the case of 42 acres of the Mèpalè 1885 plantations in the East Salween division, where 50 per cent. of the plants are reported to have had their terminal shoots killed, or to have been killed down to the ground. With the exception of a few suppressed plants none have been completely killed.

Inspection of plantations burnt in 1888.

18. Fire-record tracings in the manner prescribed in Inspector-General of Forests' Circular No. 5, dated the 14th July 1887, are only kept up for the West Mèpalè reserve. For the other fire-traced reserves we have nothing but the roughest sketch maps quite useless for this purpose.

Fire-record maps.

19. In addition to the areas for the protection of which special measures were taken, the whole of the Yè reserve, 317 square miles, escaped fire as well as large tracts of evergreen forest in Tavoy and elsewhere, but it is impossible to give the area of such tracts with any degree of accuracy.

Unburnt areas not specially protected.

4.—Grazing.

20. There are no grazing rights in any of the reserves. A few cattle were pastured in reserves by villagers engaged in teak taungya plantations, but no grazing fees were levied.

Grazing.

5.—Natural Reproduction.

21. Little or no natural reproduction of teak seems to have taken place during recent years in either the Attaran or West Salween divisions. As regards the East Salween division Mr. Hauxwell reports as follows :—

Natural reproduction of teak in reserves.

Gawlè reserve.—Reproduction very good, especially in the northern part.

Ônkaraing reserve.—Generally good.

Mègla reserve.—The eastern portion near the Thaungyin has become almost a pure teak frest.

Baledo reserve.—Very good on the low land bordering on the Thaungyin.

Myawadi reserve.—The northern half is almost a pure forest of teak poles, the southern half contains hardly any teak.

West Mèpalè reserve.—Natural reproduction has taken place sparsely all over the reserve.

East Mèpalè reserve.—Very good in the parts occupied by teak forest.

Flowering of bamboos in West Salween.

22. In the West Salween division large areas of wagôk bamboos have flowered and died during the past three years, chiefly in the Sinswè reserve. The flowering was not reported in time to do much this year, but 13 acres in the oldest dead bamboo tracts in the Sinswè reserve have been cleared by fire and will be planted up during the rains. Next year measures will have to be taken to carry out this work on as large a scale as possible.

6.—*Artificial Reproduction.*

Teak taungyas. General results.

23. The area planted by teak taungya cultivators amounts to 854 acres, or 55 acres in excess of the area planted last year. The results also show an improvement, 768 acres being sufficiently well stocked, or 267 acres more than last year.

The total cost was Rs. 5,705, or Rs. 6-10-11 per acre. The details are given below.

Division.	Reserve.	Area stocked with less than 250 plants per acre.	Area stocked with more than 250 plants per acre.	Total area planted.	Average number of plants per acre.	Total cost.	Cost per acre.
						Rs.	Rs. A. P.
Attaran	Dali ...	...	48	48	465	211	4 14 6
	Natchaung ...	33	...	33	169	185	4 1 5
	Gôngyi ...	...	17	17	508	116	6 13 2
	Kyunchaung ...	...	25	25	1,827	351	14 0 8
	Thinganyinaung ...	...	4	4	986	100	25 0 0
	Total Attaran division ...	33	89	122	582	913	7 7 9
West Salween	Sinswè ...	...	127	127	756	1,020	8 0 6
	Kahilu ...	...	37	37	789	294	7 15 2
	Ônkagyi ...	6	99	105	579	687	6 1 1
	Bilakatkyi ...	15	98	111	435	502	4 8 4
	Mèwaing ...	...	218	218	714	1,598	7 5 3
	Total West Salween division	19	579	598	649	4,051	6 12 4
East Salween ...	West Mèpalè ...	34	100	134	513	741	5 8 5
	GRAND TOTAL ...	86	768	854	618	5,705	6 10 11

Teak taungyas in Attaran division.

24. In the Attaran division during the past two years the young teak plants have been put out at distances of 33 feet by 8 inches. This system has not proved a good one and will be discontinued in future. The trees in the yas planted in this manner last year have made hardly any growth, being too much crowded in the rows. Where the planting has partially failed and the young trees are in consequence far apart the growth has been excellent, but the uncleared jungle between the lines is already encroaching and it is doubtful whether the trees will be able to hold their own among the semi-scandent bamboos in which they are planted unless expensive clearing operations are undertaken.

The poor results attained in the Natchaung reserve are attributed to late planting and to the yas having been cut in unsuitable localities.

Teak taungyas in East Salween.

25. In the East Salween division many of the cultivators ran short of food and had to spend the time that should have been devoted to keeping their yas weeded in bringing up supplies, the result being that a large number of young plants were lost.

Teak taungyas in West Salween.

26. In the West Salween reserve the yas with a few exceptions are particularly good, the seedlings being well grown and healthy.

7.—Cutting Creepers, Weeding, and Thinning.

Weeding teak taungyas.

27. In all divisions the taungya plantations of the past three years have been weeded and in the East Salween division some of the older plantations have been cleared of overgrowth. The details and cost appear in the following statement:—

Division.	Reserve.	Year of formation.	Area in acres.	Cost.	Cost per acre.	Remarks.
				Rs. A. P.	Rs. A. P.	
Attaran	Kyunchaung ...	1885	27	68 5 6	0 13 0	
		1886	34			
		1887	28			
	Dali ...	1885	27	18 0 0	0 5 4	
		1886	19			
		1887	8			
East Salween ...	West Mèpalè ...	1882	15	1,201 6 0	2 10 4	Rs. 355-8-0 not disbursed during year.
		1883	28			
		1884	41			
		1885	58			
		1886	215			
		1887	131			
West Salween	Sinswè ...	1885	92	862 0 0	8 1 9	
		1886	100			
		1887	85			
	Kahilu ...	1885	5	341 0 0	8 1 7	
		1886	49			
		1887	56			
	Onkagyi ...	1886	229	346 0 0	0 12 7	
		1887	210			
	Bilakatkyi ...	1885	58	207 0 0	0 11 2	
		1886	84			
		1887	155			
	Mèwaing ...	1884	31	273 0 0	4 5 4	
		1885	21			
		1886	11			
	Total ...	...	1,812	3,406 11 6	1 14 1	

The weeding has generally been carried out in a satisfactory manner except in the Attaran division, where it has been insufficient.

Part of Shwegun plantation thinned.

28. As an experiment about three-fourths of an acre of the Shwegun plantation was thinned, 205 poles being removed.

8.—Experiments and Exotics.

Mahogany in the Attaran division.

29. In the Attaran division the mahogany plantation at Amherst is reported a complete failure, the plantation being situated on a steep hillside with uncongenial soil.

The 12 trees growing in the Forest office compound are still alive and most of them are doing well.

Of the 140 plants reported to have been raised from seed last year 22 have been planted out in the Shwegun forest bungalow compound, nine have been distributed to private persons, seven are on hand, and the remainder have died.

There are two trees of this species, 7 feet 1 inch and 6 feet 10 inches in girth, respectively in Salween Park in Moulmein, but there is no record as to when they were planted.

Cultivation of para rubber in Mergui plantation.

30. Two acres of large tree jungle and half an acre of pônzo were cleared and planted up with *Hevea Braziliensis*. Of the 50 large trees of this

species one died as well as 779 of those set out during the last two years. Most of the latter were killed by deer. The stock at the end of the year was as follows:—

Large trees (11 years old)	49
Transplants of 1887 and 1888	6,858
Plants in nurseries	15,607

Ten of the largest trees were measured and found to average 3 feet 8 inches in girth and 44 feet in height.

Seventeen trees were tapped in July with the result that from 12 trees no milk at all was obtained and from the remaining five sufficient to yield 5 ounces of rubber.

In November 42 trees were tapped and 12 ounces of rubber obtained. In both cases the rubber appeared to be of excellent quality.

The trees are all perfectly healthy and, as far as acclimatization is concerned the experiment promises to be a complete success. Whether the yield of rubber will be sufficient to make the cultivation of the tree remunerative remains to be proved.

The trees tapped this year are probably still too young to give good results.

Castilloa elastica, Manihot glaziovii, and Ficus macrophylla.

31. The attacks of white-ants and deer reduced the number of *Castilloa elastica* plants to 65, none of which have a healthy appearance.

Seventeen ceara (*Manihot glaziovii*) plants died, reducing the number to 346. Eight plants of *Ficus macrophylla* died, but were replaced by new cuttings. The number on hand remains as before at 100.

Other trees cultivated at Mergui.

32. The three mahogany plants are still alive, but neither they nor the rain-trees, now reduced to 28, are thriving, the soil being suited to neither species.

The number of plants of other kinds on hand at the end of the year was as follows:—

Manilla hemp	434
Divi-divi	1,472
Talaingsôk	80
Annatto	352
Kyetpaung	230
Akyaw	50

Two hundred and two pounds of cleaned annatto seed collected in 1888 were sent to Moulmein for sale, but no market could be obtained for it.

The crop of 1889 amounted to a basket and a half, which was sold on the spot for Rs. 2-14-0.

Garden fenced with barbed wire.

33. A barbed wire fence to keep out deer has been constructed round the cultivated portion of the garden at a cost of Rs. 410, of which Rs. 327 was spent during the year.

Expenditure on Mergui plantation.

34. The total expenditure on the Mergui plantation charged to the Forest Department area amounted to Rs. 1,321-6-6.

A separate report on the cultivation carried out on behalf of the Civil department has already been published and need not here be repeated.

9.—Communications and Buildings.

Buildings repaired and constructed.

35. In the Attaran division the old elephant shed at Battery Point was re-shingled and floored at a cost of Rs. 335-4-0, and Rs. 17-8-0 was expended on earthwork at the new shed.

Repairs to the Natchaung rest-house cost Rs. 4.

A portico was added to the Forest office at Moulmein, the whole building earth-oiled, and some minor repairs executed at a cost of Rs. 741-13-0.

In the West Salween division a rest-house was completed at Kyunchaungwa in the Sinswè reserve chiefly out of material obtained from the dismantled Papun bungalow. The balance disbursed during the year was Rs. 1,339-8-0.

In the Kado division two new guard huts were built at Mezeik at a cost of Rs. 141-12-0 and other buildings kept in order at a cost of Rs. 26-11-8.

In the South Tenasserim division Rs. 16-3-9 was spent on repairs to buildings and Rs. 16 on a culvert in the Mergui plantation.

Steam-launch *Attaran*.

36. The launch *Attaran*, attached to the Kado division, made 119 trips during the year aggregating 4,716 miles, or 982 hours under steam. The working expenses amounted to Rs. 4,378-9-0, including wages of crew Rs. 1,486, coal Rs. 1,579, oil, &c., Rs. 346-9-0, repairs Rs. 907, and surveyors' fees Rs. 60.

Note on portable tramways called for by Inspector-General.

37. The Inspector-General of Forests has ordered a special note to be entered in this report as to what has been done, or is proposed to be done, in the way of introducing portable tramways, which in time of need might be utilized for famine relief or other works. Nothing whatever has been undertaken in this direction, and in view of the excellent water communication that exists throughout the circle, and the scattered manner in which valuable trees occur, it is not likely that their introduction will be at any time advantageous for forest work.

CHAPTER IV.

YIELD AND WORKING.

1.—Departmental Operations.

Departmental extraction of timber.

38. The teak timber worked out by Government agency amounted to 19,947 logs, or 11,604 tons.

The quantities extracted from the different divisions and rates paid are shown below.

TEAK TIMBER.

Division.	Number of logs extracted during the year.	Average rate paid contractors per log.	Average cubical contents of logs.
		Rs. A. P.	C. ft.
Attaran	823	8 2 7	36
East Salween	9,785	7 14 1	34
West Salween	9,169	7 8 2	23
Kado	170	4 6 9	26
Total ...	19,947	...	...

Four thousand and twenty-five teak logs from the Thaungyin forest were still in transit at the close of the year.

The timber of other kinds extracted on Government account amounted to 1,066 logs, or 1,097 tons, distributed as follows :—

Division.	Timber.	Number of logs worked out during the year.	Average rate paid contractors per log.	Average cubical contents.
			Rs. A. P.	C. ft.
Attaran	Padauk	139	21 12 2	49
	Thitka	97	13 5 8	84
	Pyinma	24	8 0 0	57
East Salween	Padauk	20	10 0 9	82
	Pyinma	500	8 0 0	47
	Unreserved woods	22	6 0 0	45
West Salween ...	Pyinma	246	8 0 0	49
South Tenasserim	Kanzaw	2	...	91
	Unreserved	16	...	50
	Total ...	1,066	...	...

Compared with last year there was an increase of 1,911 logs, or 1,048 tons, in the teak timber brought out and of 407 logs, or 338 tons, in woods of other kinds.

Contractors' outstandings.

39. The outstandings against timber contractors at the close of the year amounted to Rs. 14,768-14-0, distributed as follows:—

	Rs.	A.	P.
Attaran division	2,140	10	0
East Salween division	8,878	4	0
West Salween division	4,250	0	0

The whole of this is covered by work done with the exception of one item of Rs. 1,540-10-0, for which collateral security has been given.

2.—*Removal of Produce by Purchasers.*

Timber brought out by lease-holders.

40. The timber brought out by lease-holders from the Attaran forests was as follows:—

Forest.	Teak.		Other woods.			
	Logs and pieces.	Tons.	Thitka logs.	Thingan logs.	Yamanè logs.	Total other woods.
						Tons.
Mitiki-Kodugwè	371	1,174	149	11	1	182
Megwa-Kyunchaung	951		...	...	...	...
Total ...	1,322	1,174	149	11	1	182

Duty amounting to Rs. 2,955-5-0 was paid on 951 of the above teak logs and 161 logs of other kinds. The remainder had not been paid for at the close of the year.

Extracted by purchasers from unreserved forests.

41. The quantities of reserved woods worked out by purchasers is given below.

Division.	Thingan.	Pyinma.	Kaunghmu.	Anan.	Karawè.	Thitka.	Thitkado.	Kanzaw.	Total.	Revenue.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.	A.	P.
Attaran	659	7	...	...	...	...	...	...	666	6,470	14	11
East Salween ...	203	...	...	...	...	...	...	...	203	2,047	11	0
West Salween ...	60	78	...	...	...	...	...	...	138	785	4	0
Kado	32	8	...	...	...	...	...	...	85	842	9	3
South Tenasserim ...	1,487	...	78	70	84	77	8	173	1,922	2,666	8	0
Total ...	2,441	88	78	70	84	77	8	173	2,964	12,812	15	2

Unreserved woods were brought out by purchasers to the following extent:—

Division.	Tons.	Revenue.		
		Rs.	A.	P.
Attaran	4,772	10,545	0	11
East Salween	4,030	6,979	0	0
West Salween	1,773	3,318	14	8
Kado	1,816	3,626	12	0
South Tenasserim	6,352	6,527	2	7
Total ...	18,743	30,991	14	2

Increase in quantity of timber removed by purchasers.

42. The timber of reserved kinds extracted by purchasers was 1,405 tons and of unreserved kinds 7,215 tons in excess of the quantity brought out last year, and the revenue from this source has increased from Rs. 33,368-2-11 to Rs. 43,304-13-4.

The chief increase in the export of reserved woods took place in the South Tenasserim division, where there has been a great demand for boat-hulls. The duty is there paid by the log and not by the ton, so that the expansion in revenue has not been proportionate to the increased outturn. The same is the case with regard to unreserved woods, in which the increase is almost entirely composed of kanyin logs of large size, also paid for by the log, which are brought from the Salween and Attaran forests to Moulmein to be converted into boards and scantlings for export to Calcutta.

Charcoal and minor produce removed by purchasers.

43. Charcoal and minor forest produce yielded a revenue of Rs. 2,472 as detailed below.

Produce.	Attaran division.	Kado division.	South Tenasserim division.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Charcoal	164 8 0	6 0 0	13 0 0	183 8 0
Wood-oil	246 0 0	30 0 0	1,815 0 0	2,091 0 0
Ôndôn bark	..	...	70 0 0	70 0 0
Pyu bark	...	...	127 8 0	127 8 0
Total ...	410 8 0	36 0 0	2,025 8 0	2,472 0 0

3.—*Free Grants.*

Free grants.

44. Free grants of reserved woods for religious purposes and works of public utility were made as follows:—

District.	Number of logs.								
	Teak.	Pyinma.	Thingan.	Anan.	Karawè.	Padauk.	Thitka.	Thitkado.	Total.
Amherst	85	161	31	226	...	5	2	13	473
Tavoy	...	4	1	4	5	...	...	...	14
Mergui	...	...	12	97	...	...	2	...	111
Total ...	85	165	44	327	5	5	4	13	598

4.—*Summary of Outturn.*

Outturn of circle.

45. The total outturn of the Tenasserim circle was as follows:—

How removed.	Timber.				Charcoal and minor forest produce.
	Teak.	Reserved woods other than teak.	Unreserved woods.	Total	
	Tons.	Tons.	Tons.	Tons.	Rs.
By Government agency	11,604	1,061	36	12,701	...
By lease-holders	1,174	181	1	1,356	...
By purchasers	...	2,964	18,743	21,707	2,472
Under free grants	23	421	157	601	...
Total ...	12,801	4,627	18,937	36,365	2,472

5.—*Drift Operations.*

Collection and disposal of drift wood.

46. The quantity of drift timber collected and disposed of is shown in the following statement:—

		Balance of 1887-88.	Collected in 1888-89.	Returned to claimants.	Sold or disposed of.	Balance at close of year.
		Logs.	Logs.	Logs.	Logs.	Logs.
Kado division ...	River drift teak ...	5,278	5,895	2,862	3,241	5,070
	Sea drift teak ...	731	903	57	689	888
South Tenasserim division.	Sea drift teak ...	1	1	...	1	1
	Other woods ...	5	37	4	33	5

The revenue realized on sales was Rs. 68,536 and on salvage Rs. 10,896, making a total of Rs. 79,432.

The total expenditure incurred on salving operations, inclusive of quota of charges for other expenditure, amounted to Rs. 39,651.

6.—*Girdling.*

Girdling operations.

47. In the East Salween division 995 teak trees were girdled by the Divisional Officer in the Gawlè reserve and 200 pyinma trees in unreserved forests in the Haungtharaw valley. In the Attaran division 300 pyinma trees were girdled on the Zami river.

7.—*Disposals and Sale Depôts.*

Local sales.

48. In the South Tenasserim division 16 logs (17 tons) of unreserved woods brought out by Government agency and 12 confiscated logs (18 tons) were sold for Rs. 112-5-9.

A balance of 401 broad-gauge sleepers on hand in Calcutta were sold for Rs. 1,506-8-0 net.

Accounts of last year's operations at Tavoy.

49. The accounts of the sleeper operations, alluded to in paragraph 40 of last year's report, were brought to a close with the following result:—

Receipts.

	Rs.	A.	P.
Sale-proceeds of 15,788 narrow-gauge sleepers at Madras ...	22,110	3	0
Sale-proceeds of 14,000 narrow-gauge sleepers at Calcutta ...	16,792	0	0
Duty paid by sleeper contractors on 2,478 logs converted ...	3,717	0	0
Total ...	42,619	3	0

Expenditure.

	Rs.	A.	P.
Paid contractors for 29,788 sleepers delivered at Tavoy ...	32,711	12	9
Freight, commission, &c.	6,884	14	9
Total ...	39,596	11	6
Leaving a profit to Government of	3,022	7	6

The sleepers supplied to the Bellary-Kishna Railway were subjected on arrival at Madras to a very rigorous examination and the consignees refused to take over, except at reduced rates, large quantities which, though perfectly serviceable, were either a trifle under the specified dimensions or had slightly cracked on seasoning. The profits on the transaction were therefore considerably less than they would otherwise have been.

Timber depôt at Moulmein.

50. The arrivals and disposals of timber at the Moulmein depôt and of sea drift logs at local depôts are shown in the following statement:—

Description.	Balance on 1st April 1888.		Arrivals during year.		Sales and disposals during year.		Balance on 31st March 1889.	
	Logs.	Tons.	Logs.	Tons.	Logs.	Tons.	Logs.	Tons.
Teak	2,622	1,974	19,947	11,604	20,905	12,438	1,664	1,144
Drift teak	5,202	3,295	5,501	4,789	5,680	4,324	5,023	3,760
Woods of other kinds ...	421	321	988	1,019	683	745	726	596
Drift of other kinds ..	76	47	42	20	71	34	47	33
Miscellaneous scantlings, sleepers, &c.	401	29	22	22	19	18	404	133
Sea drift teak	731	313	1,234	846	1,077	548	888	611
Sea drift woods of other kinds...	...	...	21	14	21	14	...	...

Summary of sales at Moulmein depôt.

51. The sales from the Moulmein depôt realized Rs. 5,21,733 as detailed below.

	Logs.	Tons.	Rs.	Rs. per ton.
Teak auction sales ...	20,866	12,407	4,82,307	34 13 6
Padauk sold on indent to Madras Gun Carriage Factory	189	189	19,846	105 0 1
Ingyin indent sales ...	46	33	734	22 3 11
Thingan indent sales ...	24	24	335	13 15 4
Thitka indent sales ...	98	164	2,486	15 2 6
Pyinma indent sales ...	305	315	5,034	15 15 8
Unreserved woods indent sales	21	20	225	11 4 0
Drift teak auction sales ...	3,438	2,114	60,088	28 6 9
Drift teak other woods sales ...	71	34	678	19 15 1

At local depôts in the Kado division 331 sea drift teak logs, measuring 216 tons, were sold for Rs. 7,324, or Rs. 33-14-6 per ton, and 21 sea drift logs of other kinds, measuring 14 tons, for Rs. 220, or Rs. 15-11-5 per ton.

Approximate value of stock timber at depôts.

52. The value of the stock in hand at depôts at the close of the year exclusive of foreign timber is estimated at Rs. 1,15,026.

8.—*Imports and Exports of Timber.*

Imports of foreign timber into Kado.

53. The balance of foreign timber at the Kado revenue station at the beginning of the year was 40,490 teak logs estimated at 32,392 tons and 60 logs of other kinds. The imports during the year amounted to—

112,639 full-sized teak logs.
18,444 under-sized teak logs.
4,672 stem-pieces.

Total ... 135,755 teak logs as well as 8 logs of other kinds.

Compared with the imports of the previous year there was an increase of 19,097 full-sized logs and a decrease of 1,228 under-sized logs and 1,072 stem-pieces, or a total increase of 16,797 logs.

The quantity of timber removed from the Kado revenue station was 119,646 teak logs and six logs of other kinds. The balance at Kado at the close of the year was 56,599 teak logs estimated at 48,501 tons and 62 logs of other kinds.

Quantity of foreign teak timber on which duty was paid.

54. The quantity of foreign teak timber on which duty was paid at Kado and the corresponding figures of last year are as follows:—

Year.	Logs.	Tons.	Value.	Duty realized.
			Rs.	Rs.
1888-89	157,413	156,439	82,48,112	41,252
1887-88	158,346	140,903	56,98,297	28,506
Difference in 1888-89 ...	- 933	+ 15,536	+25,49,815	+12,746

Large quantities of timber were declared for duty just before the close of the year to escape the enhanced rates which came into force on the 1st April 1889.

Average market value of foreign teak.

55. The average market value during the year was Rs. 52-6-4 per log, or Rs. 52-11-7 per ton, which shows an increase of Rs. 16-6-7 per log, or Rs. 12-4-6 per ton.

Registration of hammer-marks.

56. In the Kado division 135 new hammer-marks for teak timber were registered at Rs. 100 each, 50 were transferred at Rs. 10 each, 113 were renewed at Rs. 25 each, and 151 at Re. 1 each. For woods of other kinds 14 new marks were registered in the Kado division and one in the South Tenasserim division.

The total receipts from this source being Rs. 17,051, or Rs. 3,053 less than last year.

Exports of teak timber from Moulmein.

57. The total exports from the port of Moulmein were 93,465 tons, or 23,042 tons less than in the previous year, due to no shipments having been made to the Straits Settlements and to smaller consignments to the Madras presidency.

Of other woods 2,651 tons were exported, or rather more than double that sent away last year.

The exports of teak from Moulmein to Europe were 27,710 tons, or 11,943 tons in excess of the exports of the previous year.

Export trade of teak to Europe.

58. The following notes on the timber trade of Moulmein are extracted from a memorandum furnished me by Messrs. Foucar and Co.

In April prices for Europe squares stood at Rs. 105 per ton and after some fluctuations gradually rose to Rs. 130 per ton, receding again at the end of the year to Rs. 125.

In the home market, owing to diminished stocks and to a call from the Admiralty for 7,000 tons, prices rose from £10 to £12-10-0 per ton for ordinary specifications, as much as £14 per ton being paid for good assortments. The German, Belgian, and Russian Governments also made large purchases in the London market. Two small cargoes were sent to Italy and one to America, Sweden taking a few hundred tons for ship-building.

Shipments of planks have been further increasing, £13 to £15 per ton being readily obtainable.

The business in "Moulmein planks" also shows a continuous improvement, but long squares of good dimensions are very scarce.

Stocks at home at the end of the year did not exceed 12,000 tons including Bangkok timber.

About 15,000 tons of tonnage have been chartered for to load at Bangkok for Europe during the current year. Timber from that port is said to be coming more into favour and now sells at about £12 per ton.

Freights homeward have risen from 37*s.* 6*d.* to 50*s.* for sailing vessels and a steamer was lately chartered at 62*s.* 6*d.*

Export trade of teak to Indian markets.

59. As regards the Indian market prices for inferior timber have not been good at Bombay, but first class squares have been in fair demand at Rs. 90 to Rs. 110 per ton.

In Calcutta prices have varied, but at the close of the year stood about the same as last year.

Shingles have risen in Moulmein from Rs. 15 to Rs. 16 to Rs. 19 to Rs. 20 per 1,000.

Owing to high freights there has been little trade in tea-boxes made from thitka and other high class woods, but boxes made of kanyin, which can be supplied at a cheap rate, have been largely exported.

CHAPTER V.

FINANCIAL RESULTS.

Financial results.

60. The revenue and expenditure of the year amounted to—

	Rs.
Revenue	6,69,822
Expenditure	3,74,529
Surplus ...	2,95,293

showing a net increase of Rs. 80,864 on the surplus of last year.

Comparison with previous years.

61. The comparison with the figures of the previous three years is as follows:—

Year.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1885-86	4,19,243	3,18,515	1,00,728
1886-87	5,01,312	4,20,656	80,656
1887-88	5,48,803	3,29,374	2,14,429
1888-89	6,69,822	3,74,529	2,95,293

Detailed comparison with previous year.

(a) Timber extracted by Government agency.

62. The revenue on timber extracted by Government agency amounted to Rs. 4,81,743, showing an increase of Rs. 1,12,577 on that of the previous year, due to a larger quantity and better class of timber having been brought to depôt and to improved sale prices. The expenditure was Rs. 2,19,022, or Rs. 37,060 more than last year, attributable to the same cause, contractors receiving as payment a fixed proportion of the sale value of the timber.

(b) Timber extracted by consumers.

63. The receipts for timber and minor forest produce removed by purchasers amounted to Rs. 45,580, or Rs. 10,384 in excess of last year, the cost of collection being only Rs. 483. The improvement is general in all divisions except in Tavoy, where the revenue of the previous year was abnormally high owing to large sleeper works.

(c) Drift operations.

64. In receipts and disbursements on account of drift there was a slight falling-off of Rs. 2,510 and Rs. 1,915 respectively, which calls for no remark.

(d) Duty on foreign timber.

65. The amount of duty collected on foreign timber shows an increase of Rs. 12,746, which has been explained above. The expenditure on this account was Rs. 23,664, or Rs. 3,262 in excess of last year.

(e) Miscellaneous.

66. Under Miscellaneous there was a decrease of Rs. 7,118 in receipts and an increase of Rs. 3,603 in expenditure. The former is due to fewer hammer-marks having been registered and to fines inflicted by the Deputy Conservator, Kado Division, sitting as a Magistrate having been credited to Law and Justice instead of to Forests as heretofore. The latter is accounted for by a refund of Rs. 2,048-5-9, excess duty paid by Messrs. Macgregor and Co., and to Rs. 239, law charges.

(f) Live-stock, stores, &c.

67. The disbursements on account of feed and keep of cattle and purchase of stores were Rs. 169 less than last year.

(g) Communications and buildings.

68. The expenditure on communications and buildings shows an increase of Rs. 1,250, the principal outlay being incurred on the Kunchaungwa bungalow and on alterations to the Moulmein Forest office.

(h) Works of improvement.

69. The extension of teak taungya plantations, together with weedings carried out on a larger scale mainly accounts for an increase of Rs. 5,744 in expenditure on works of improvement.

(i) Establishments.

70. The cost of establishments was Rs. 322 in excess of the previous year. The pay of controlling officers including the Conservator was less by Rs. 674, but forest and office establishments show an increase of Rs. 708 and Rs. 288 respectively. There was a small decrease under travelling allowances and contingencies.

Revenue and expenditure of each division.

71. The following table shows the revenue and expenditure of each division :—

Division.	Revenue.			Expenditure.	Surplus or deficit.
	Collected locally.	Agency collection.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Attaran and agency	...	70,076	70,076	66,186	3,890
East Salween	134	2,65,374	2,65,508	1,29,225	1,36,283
West Salween	62	1,58,424	1,58,486	86,825	71,661
Kado	1,46,105	...	1,46,105	64,689	81,406
South Tenasserim	29,647	...	29,647	27,654	1,993
Total ...	1,75,948	4,93,874	6,69,822	3,74,529	2,95,293

Summary of receipts and charges.

72. The summary of receipts and charges compared with the last two years is as follows :—

	Receipts.			Charges.			Surplus or deficit.					
	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.		1887-88.		1888-89.	
							Surplus.	Deficit.	Surplus.	Deficit.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Departmental timber operations.	3,78,199	3,69,166	4,81,743	3,21,639	2,12,748	2,41,751	56,560	...	1,56,418	...	2,39,992	...
II.—Other revenue	1,23,113	1,74,037	1,88,079	81,664	82,325	93,502	41,449	...	92,312	...	94,577	...
III.—Formation and improvements.	...	...	...	17,353	34,301	39,276	...	17,353	...	34,301	...	39,276
Total ...	5,01,312	5,43,203	6,69,822	4,20,656	3,29,374	3,74,529	80,656	...	2,14,429	...	2,95,293	...

CHAPTER VI.

Act and rules.

73. The scale of fees charged for the registration of hammer-marks has been revised and a slight alteration made to Rule 12, which however does not affect existing practice. A modification was also introduced in the directions for the management of the Kado timber station as regards the registration of powers-of-attorney. By Notification No. 154, dated the 19th November 1888, the rate of duty leviable on foreign timber arriving at Kado after the 31st March 1889 has been raised from ½ to 7 per cent. *ad valorem.*

Elephants.

74. Of the eight elephants maintained in this circle one died during the year and has not yet been replaced. The average monthly cost of each animial was Rs. 31-10-4.

Controlling staff.

75. The Tenasserim circle was in charge of Colonel Seaton till the 13th February 1889, when on his proceeding on furlough he was relieved by the writer of this report.

The health of officers has been fairly good, but Mr. Hauxwell was ill with dysentery during the whole of the rains and eventually had to take leave to the hills. Mr. Weston also, who was deputed to accompany the column which proceeded from Moulmein to Karenni, was laid up with fever before reaching the frontier and had to return to Moulmein and go on leave. During Mr. Weston's absence Mr. Hauxwell held charge of the Kado division in addition to his ordinary duties. The Officiating Conservator desires to acknowledge the cordial assistance he has received from all Divisional Officers.

Executive staff.

76. The reports on the conduct of the executive staff are not very favourable, but Forest Ranger Maung Shwe Ka in the West Salween division and Maung Pyu in the East Salween division have done excellent work. Two members of the temporary establishment at Kado were dismissed on being found guilty of using a forged hammer-mark. The health of the subordinate establishment was good.

77. Office establishments have worked generally well. Credit is particularly due to Babu Ramaswamy, on whom devolves most of the agency and accounts work, and the Conservator's office has been satisfactorily superintended by Mr. Johnson.

MOULMEIN:
The 22nd June 1889.

J. W. OLIVER,
Offg. Conservator of Forests, Tenasserim Circle.

REPORT

ON

FOREST ADMINISTRATION

IN

THE PEGU CIRCLE

For the year 1888-89,

BY

E. P. POPERT, Esq., Conservator of Forests.

CHAPTER I.

Area and Boundaries.

1.—Area.

1. Twenty square miles have been added to the area of reserved forests. By the reservation of the Myohla forests (19 square miles) and South Zamayi extension (2 square miles) 21 square miles have been added, but about 1 square mile of the Wanetchaung reserve has been excluded and made over to the State Railway authorities.

Additions to area of reserved forests.

2. Two small tracts of cutch forest in the Sinbaungwè township, Thayetmyo district, have been selected by the Civil and Forest Officers as suitable for reservation, and the joint report of these officers is awaiting the orders of the local Government. In the Toungoo division proposals for two fuel and fodder reserves were submitted,—Swa, 8 square miles; Kyungôn, 4 square miles,—and an addition to the Saing reserve of about 300 acres, by which an improved boundary will be obtained, was proposed. These proposals have been preliminarily notified.

Proposed addition to area of reserved forests.

3. Some slight progress has been made in forest settlement operations. The two proposed reserved forests in the Shwegyin division, aggregating about 340 square miles, have been settled and await the sanction of the local Government, and the proposed Pyuchaung reserve, about 90 square miles, was visited and examined by the Forest Settlement Officer.

Progress in forest settlement.

4. The area of sanctioned reserved forests at the close of the year amounted to 3,318 square miles.

Area of sanctioned reserves.

2.—Boundaries.

Demarcation of boundaries of reserves.

5. The Myohla reserved forest, sanctioned during the year, was demarcated at a cost of Rs. 213-13-0 with 32 mounds and posts, numbered boards, and blazed lines. The demarcation of the South Zamayi extension was not completed during the year.

6. Attention was paid to the repairs of boundary marks, posts, &c., in the different divisions; some of the reserves in the northern part of the Tharrawaddy division have still to be finished as also some of those in the Toungoo division.

CHAPTER II.

1.—Surveys.

7. The outturn of the season's work amounted to 150·38 square miles surveyed on the 4-inch scale and 162·3 square miles of unreserved forests, &c., surveyed on the 2-inch scale. The area traversed consisted of 350 square miles. The cost rate of 4-inch topography was Rs. 274·85 per square mile and that of 2-inch Rs. 100·32, exclusive of cost of traversing and triangulation. The expenditure of the party to the end of September is estimated at Rs. 1,08,670. An increase of Rs. 2,527-8-0 is due to the fares of khalassies between Rangoon and Calcutta having been raised by the Steamer Companies from Rs. 7-8-0 to Rs. 10 per man. The season was a fairly healthy one; one sub-surveyor and six khalassies died, and one man was shot by dacoits. The latter during March and April interfered materially with the work, and on several occasions sub-surveyors had to leave their ground on account of dacoits being, or supposed to be, in the forests being surveyed.

2.—Working Plans.

Working plans framed.

8. Working plans for the Minhla (40 square miles) and Gamôn (97 square miles) working circles were framed and submitted to the Inspector General of Forests. They have since received his approval and the sanction of the local Government. They provide for an annual extraction of 500 and 1,000 teak trees respectively.

Field work of Working Plans division.

9. The Working Plans division under Mr. Hoghton, Deputy Conservator of Forests, completed the examination of the Bawbin, Minbu, and part of the Taungnyo districts. The area examined amounts to 158 square miles approximately and the cost to Rs. 17,337-15-5, or Rs. 109-11-9 per square mile. Compared with last year the cost per mile is considerably higher; this is in consequence of the pay of the officer in charge of the division being charged to the work for the whole year instead of for the working season.

3.—Annual Plans of Operations.

Annual plan of operations adhered to.

10. The plans of operations framed by Divisional Officers have generally been closely carried out. Prome division again fell short of the anticipated outturn of timber in consequence of cholera, which attacked the contractors, and of the loss by death of several elephants.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

1.—Establishment.

Strength of controlling staff.

11. The controlling staff was strengthened in January 1889 by the addition of two newly trained officers from England, Messrs. Tottenham and Carter, but is still below the actual requirements.

Permanent subordinate establishment unchanged.

12. No alterations were made in the strength of the permanent subordinate establishment. The statement below shows its cost during the year and also that of the temporary establishments.

Division.	1887-88.		1888-89.			
	Cost of permanent establishment.	Cost of temporary establishment.	Sanctioned permanent establishment.	Sanctioned temporary establishment.	Actual cost of permanent establishment.	Actual cost of temporary establishment.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Prome ...	7,724	2,410	8,317	3,192	7,806	2,738
Tharawaddy ...	14,518	4,321	16,638	7,782	13,747	4,500
Rangoon ...	11,018	3,544	10,950	3,960	10,795	2,817
Toungoo ...	9,252	1,795	9,778	1,812	9,027	1,368
Shwegyin ...	5,602	1,173	5,157	1,824	5,243	1,057
Western ...	4,642	2,081	5,672	2,136	5,178	2,093
Agency ...	27,563	6,877	27,210	14,280	27,198	11,156
Total ...	80,319	23,101	83,722	34,986	78,994	25,724

2.—General Protection and Breaches of Forest Law.

Forest offences and prosecutions.

13. In the several divisions 510 cases implicating 683 men were disposed of. Of these 339 cases against 427 men were compounded by Divisional Officers and Rs. 6,825 realized as compensation. The balance, 171 cases, involving 256 persons, were sent up for trial before Magistrates and resulted in a conviction in 145 cases and 216 men. There were no very serious forest offences. The greater proportion (195 cases, 233 men) consisted of unauthorized boiling or felling of cutch trees. In addition hundreds of cases of theft of cutch trees from reserves remained undetected or unpunished. The temporary establishment employed worked unsatisfactorily. It is not to be expected that temporary hands will take the same interest in their work as permanent ones, while they are more likely to accept bribes.

Awards to informers under Rule 44 amounted to Rs. 312.

3.—Forest Fires.

General result of fire-protection.

14. The dry season was again unusually long and little or no rain fell. The watchers had to be entertained very early and could not be discharged until June. The results, however, are more satisfactory than in the previous year. Of a total area of 139,592 acres attempted to be protected 120,314 acres were unburnt. Last year 34,392 acres were burnt out of 118,779 attempted. The cost in 1887-88 was Rs. 10,461 and this year Rs. 12,233, or 1 anna 5 pies per acre attempted and 1 anna 8 pies per acre protected.

Prome division fire-protection.

15. In all four fires occurred in the fire-protected areas. The first in the plantation at Prome was discovered immediately and extinguished before it had made any way. Two boys were seen igniting dry leaves in the plantation (*i.e.*, setting fire to it). They were sent up for trial, but discharged on a question of identity. The plantation was fired a second time, evidently wilfully, and the fire ran through the whole area before assistance could be procured. The offenders were undiscovered. In reality the trees in this plantation are now of such a size that a ground fire does but little damage. In the Chaungzauk reserve one fire originated from sparks blown from a neighbouring taungya, which was being burned, and was put out after it had spread through 3 acres of taungya plantations. Little damage is reported to have been done. The origin of the second fire in this reserve is unknown, but is ascribed to the carelessness of some persons going along the fire-trace. Some 10 acres of taungya plantations were burnt through and the young trees considerably scorched. The villagers of Kadinngazin turned out and helped to extinguish the fire.

The total expenditure upon the season's work was Rs. 806, or 2 annas 3 pies per acre attempted and the same per acre protected.

Tharawaddy division fire-protection.

16. Two fires extending over 11 acres occurred in the Thônzè Kôn-Bilin trace. The first was traced to four Shans, who have since absconded. The cause of the second is unknown. A fire was discovered inside the Thônzè-Kudugwè trace, but was quickly put out and only 2 acres were burnt. Four fires occurred in the Môkka Kadin-Bilin block. No. 1 was caused by the fire crossing the trace while the jungle outside was being burnt by the coolies and only ran over 6 acres. No. 2 spread over 83 acres before it was extinguished and is supposed to have been caused by some elephant-men, who were seen entering the reserve to search for a strayed elephant. No. 3 was most serious and was not put out until 1,850 acres had been burnt. It was caused by sparks from one of the taungyas inside the reserve, as was also the 4th, which spread over 70 acres. In the Minhla-Myaung area one fire occurred and traversed 310 acres before it was extinguished. The fire is supposed to have been caused by betel-leaf thieves going through the reserve to the Karen betel-vine plantations. While burning the taungyas in the Minhla-Môkka area a high wind carried the sparks across the trace, but the fire was quickly put out out after burning 3 acres. Three fires occurred in the Nyanle reserve; two of these, there is every reason to believe, were caused maliciously. They originated near the village of Myogya, a village known to be the resort of bad characters. The forester in charge of the reserve has twice been the means of obtaining convictions against dacoits or thieves whose relations live at this place. The fires ran over 125 acres of reserve. The third fire was accidental and was put out after 5 acres had been burnt; it started from the new taungyas. One acre of Myodwin was burnt. Two acres in the Payagyi trace were also burnt; fire ascribed to carelessness of travellers as it started close to the cart-road. A small fire extending over 4 acres occurred in the Bawbin reserve. There were 5 fires in the Kangyi reserve; the cause of four is unknown; 410 acres were burnt over. The fifth fire arose while the new taungyas were being burnt and ran over 14 acres. Three fires occurred in the Bwet reserve. The first, covering 6 acres, was caused by the fire from outside crossing the trace while the jungle outside was being burnt; the second, extending over 5 acres, started inside the reserve and is supposed to have been caused by carelessness of travellers. The third fire, which traversed about 85 acres, was caused by carelessness on the part of one of the watchers; he was seen to enter the reserve with a lighted green cheroot and fire broke out at the place shortly afterwards. He has been sent up for trial. The protection of the Kyaukkyidaung and Gwedaukkwin reserves has again been a failure, nearly half of the former and the whole of the latter, with the exception of 25 acres, being burnt. In all there were 10 fires in these reserves. These reserves are situated nearly in the centre of the Shwele cutch-producing area, and there are hundreds of cutch-boilers near them. Green cutch of any size is exhausted outside the reserves; the boilers have taken to stealing from the reserves and many of them have been caught and punished. There is little doubt the principal fires may be ascribed to these men or their friends. Upon one occasion fire was discovered in five different places at the same time.

The total expenditure was Rs. 5,990-2-3, or 2 annas 1 pie per acre attempted and 2 annas 5 pies per acre protected.

Rangoon division fire protection.

17. Kyetpyugan plantation was successfully protected and only 5 acres of forest were burnt in the Magayi reserve. The protection of the large block in the South Zamayi reserve has been only partially successful; 22 acres of plantations and 7,040 acres of forest were burnt over. The Karens ascribe the fire to incendiarism, but more probably it was owing to their neglect to keep the traces clear of fallen leaves and rubbish.

The cost amounted to Rs. 2,772, or 1 anna 3 pies per acre attempted and 1 anna 6 pies per acre protected.

Toungoo division fire-protection.

18. The Saing-Yanè reserve and the taungya plantations in the Kabaung reserve were successfully protected. One fire occurred in the Pyunchaung reserve and spread over 1,546 acres. It was the result of disobedience of orders on the part of the

forester in charge. It is certain that the fire could never have run over an area of 1,546 acres if proper efforts had been made to extinguish it. Three fires occurred in the East Swa reserve; two of these are said to have been wilfully caused, and the third arose from sparks being carried over from the unreserved forests on the north side of the stream. Four fires took place in the Bôndaung reserve and extended over 1,190 acres. The principal one was started by a lunatic, who cut a ya inside the reserve and set fire to the forest round his ya; some 800 acres were burnt over before the fire was extinguished. A second fire, which burnt over 375 acres, was the act of an incendiary, who was seen to start the fire, but managed to escape in the thick jungle without being recognized.

The cost of the season's work was Rs. 2,665, or 10 pies per acre attempted and 11 pies per acre protected.

Summary of fires.

19. The following statement shows the areas of plantation and forest burnt over in the different reserves. The area of plantations, sowings, &c., is fortunately much less than in the previous year:—

Division.	Reserve.	Area fire-traced.	Area on which fires spread.		
		Acres.	Total.	Of forest.	Of plantations, sowings, &c.
Prome	Plantation	75	75	...	75
	Chaungzauk... ...	5,735	13	...	13
Tharrawaddy	Bwet	2,886	96	42	54
	Gwedaukkwin ...	2,000	1,975	1,491	484
	Kyaukkyitaung ...	2,000	900	764	136
	Nyaulè	4,518	130	68	62
	Lower Payagyi ...	420	2	...	2
	Bawbin	1,500	4	2	2
	Gwedauksan ...	285	...	...	...
	Kangyi	4,914	424	397	27
	Myodwin	40	1	...	1
	Myaung	1,860	310	228	82
	Minhla	2,800	8	...	8
	Môkka	540			
	Môkka	10,591	1,946	1,587	359
	Kadin-Bilin	7,826	63	41	22
	Kôn-Bilin	1,825	1	1	...
	Thônzè	2,135	12	2	10
Rangoon	Kyetpyugan... ...	940	...	...	...
	Magayi	3,744	5	5	...
	Zamayi	31,288	7,062	7,040	22
Toungoo	Pyunchaung... ...	8,440	1,546	1,146	400
	Saing-Yanè	19,200	...	...	...
	East Swa	17,280	8,520	8,480	40
	Bôndaung	10,240	1,190	1,190	...
	Kabaung	2,560	...	...	...
	Total ...	189,592	19,278	17,484	1,794

Record of results of fire-protection.

20. The method advocated by the Inspector-General of Forests in Circular No. 5, dated the 14th July 1887, has been adopted wherever accurate maps are available, *i. e.*, for the southern part of the Tharrawaddy division. In the other divisions, where only outline sketch maps of reserves have been made, any attempt to enter the results of fire-protection would be useless and valueless.

Effect of forest fires of previous year upon plantations.

21. A careful examination of the plantations burnt through last year has been made in accordance with the instructions contained in Government of India Resolution upon last year's report.

(a) Prome plantation.

The trees in the Prome plantation have suffered little or no damage.

(b) Tharrawaddy plantation.

In the Kyaukkyidaung reserve 62 acres of plantations were burnt through; this area is made up of—

	Acres.
1883, cutch taungyas	10
1884, teak and cutch taungyas	34
1885, teak and cutch taungyas	18

Where the plantations have closed up the injury by fire has been *nil*, but where the kaing grass is dense the teak has been more or less burnt back, but in no cases destroyed; it will all recover. The cutch in the plantations of 1883 and 1884 has suffered severely; where fully stocked little harm has accrued, but unfortunately a large proportion of the plantations consists of small groups and single trees of cutch, 15 to 20 feet high, surrounded by grass, and many large stems have been burnt back to the ground. The intervening patches of kaing contain numerous suppressed cutch plants, which have been burnt down and have sent out feeble, limp shoots, which will probably never come to anything.

Padetmyaung reserve.

The situation of the Padetmyaung reserve is similar to that of the Kyaukkyidaung; the soil too is similar, and the above remarks therefore apply equally to it. The plantations burnt through in this reserve were—

	Acres.
1883, cutch taungyas	22
1884, teak and cutch taungyas	148
1885, teak and cutch taungyas	45

Bwet reserve.

Inside the Bwet fire-trace the following plantations were burnt:—

	Acres.
1875, teak taungyas	25
1876, teak taungyas	5

These plantations have not suffered at all; they are in very dry forest and are well stocked, and the trees being very close together; there is no undergrowth.

Nyanlè reserve.

In the Nyanlè reserve the total area of plantations burnt was 100 acres, comprising—

	Acres.
1880, teak taungyas	18
1882, teak sowings	20
1884, teak taungyas	44
1885, teak taungyas	4
1886, teak taungyas	19

To the three groups of older plantations the damage has been *nil*, the forest being dry and the young trees well out of the reach of fire. In 1885 plantations a few young trees have been killed and a few others have their stems split by the intensity of the fire, but the plantations are well stocked and the loss of these few trees can do them no harm. The damage to the 1886 taungyas has been severe, but not permanent. The greater number of plants were burnt back, but during the rains they have all sent out stool shoots, the objection being that where there should be one tree there are now four or five; this will be remedied by cutting down all the shoots but one from each stool.

Bawbin reserve.

In the Bawbin reserve only 9 acres of plantations were burnt, namely, 2 acres planted in 1866, 4 acres planted in 1879, and 3 acres in 1884. To the 1866 and 1879 plantations the damage has been trifling, but the small patch of 1884 plantation was very seriously damaged; a good many of the plants appear to have been killed outright. The "ya" is one mass of kaing grass, so it is no wonder that the effect of the fire was serious; fortunately only a small area of this year's plantations was burnt.

Kangyi reserve.

Thirty-six acres of plantations were burnt through in the Kangyi reserve, namely, 18 acres planted departmentally in 1864, to which the damage done was small, and 18 acres of teak taungya plantations planted in 1883. These yas are very poorly stocked; what few trees there are are stunted and unhealthy; all have been seriously

damaged by fire; many were burnt back to the roots, whilst others have now a forked top instead of a straight terminal shoot; the plantation was one mass of kaing grass and hence the disastrous results of the fire. An attempt has since been made to re-stock the area with cutch.

Minhla reserve.

In the Minhla reserve the plantations burnt were—

80 acres of 1883 plantation; | 76 acres of 1884 plantation;
103 acres of 1885 plantation;

or a total of 259 acres. Fire has seriously damaged nearly the whole of the young plants in these plantations; the terminal shoots in the older plantations, 1883 and 1884, have been killed, and the tops of the trees are now forked and branched; the stems of some of these plants are split and scarred, whilst a few trees have been burnt back to the ground. In the 1885 plantations nearly the whole of the plants were burnt back to the ground, but they have all sent up very vigorous shoots, and when the superfluous ones amongst these have been cut out the plantation will be little the worse for the fires. In the majority of these plantations the ground is covered with a dense growth of a creeping grass called by the Burmans "myetni;" this dries very early in the dry weather and affords plenty of combustible material. It is to its presence that the serious effects of the fire must be attributed.

Môkka and Kadin-Bilin reserves.

In the Môkka Kadin-Bilin fire-traced area the number of taungya plantations burnt was very large, namely, 2,203 acres. These may be divided into three groups—

		Acres.
(1)	Plantations planted between 1878 and 1880 ...	... 756
(2)	Plantations planted between 1881 and 1883 ...	... 674
(3)	Plantations planted between 1884 and 1886 ...	... 773

The damage done to the first of these groups is slight. A few suppressed trees have been killed out, but they would have died naturally if there had been no fire. In the second group, namely, those planted from 1881 to 1883, no serious harm has been done; a few trees have been killed out and the terminal shoots of a few have been injured, but the plantations are as a rule well stocked and can well afford to lose a few plants. In a few low-lying parts, where there is abundance of kaing grass, the plantations have suffered more severely and most of the plants have been burnt back to the ground. They have, however, all sent out vigorous young shoots. It is the third group, namely, that planted from 1884 to 1886, that shows the effects of the fire most. The 1886 plantations have been burnt back almost to a tree, but as usual vigorous young shoots have been thrown up. In the 1884 and 1885 plantations a few plants have been burnt back, but a large number of plants have had their terminal shoots killed and are now stag-headed, and will probably never recover from the effects. It would have been much better had they been burnt back to the ground, then they would simply have lost two or three years' growth, whereas as it is they have been permanently injured. The trees thus injured form, however, only a small proportion of the total number of plants, and there are plenty left to stock the planted area.

Kôn-Bilin reserve.

In the Kôn-Bilin reserve 252 acres out of the total 368 acres of plantations in the reserve were burnt through. These plantations were planted up as follows:—

	Acres.
In 1879 and 1880	66
In 1881 and 1883	104
In 1883 and 1886	82

The damage done here is similar in all respects to that done in the Môkka Kadin-Bilin fire-traced area.

General.

In addition to the abovementioned damage to the young plantations there is no doubt that the fire has encouraged the attacks of insects. The terminal shoots are many of them being bored by some insect, probably a beetle. No doubt the fire kills many insects, but at the same time it impairs the vigour of the plants and renders them

more liable to the attacks of insects, which placed in favourable circumstances multiply innumerably.

(c) Toungoo plantations.

The plantations run through by fire last hot season are reported to have incurred no injury of a permanent nature.

4.—Grazing.

Grazing in reserves.

22. In reserves in the Tharrawaddy division Rs. 126 were realized as grazing dues upon 250 head of cattle, and Rs. 97-4-0 were collected in the Rangoon division upon 308 animals. In the former division 1,598 head of cattle were grazed free of charge by right-holders.

5 and 6.—Reproduction by Natural and Artificial Means.

(a) Improvement Fellings.

Improvement fellings in the Toungoo and Prome divisions.

23. In the Toungoo division, with a view partially to the natural reproduction of teak, but mainly to assist in the development of all teak trees already forming part of the stock within the fire-traced reserves, improvement fellings have been made and all trees dominating or otherwise interfering with the growth of teak have been removed (by felling or girdling). About 100 acres in the Bôndaung reserve and about 800 acres in the Saing-Yanè reserve have been treated in this way, and the total cost has only been Rs. 611-5-2. It is too early to decide the result of the experiment, but it promises to fulfil the purpose for which undertaken. A similar operation on a small scale was conducted in the Chaungzauk reserve, Prome division, and Rs. 11-12-0 were expended in removing dominant trees and bamboos.

(b) Regular Plantations.

Addition to regular plantations.

24. Twenty-one acres were added to the Magayi teak plantations. The cost, including seed, &c., amounted to Rs. 302-4-6, or Rs. 14-6-4 per acre, with an average number of seedlings, healthy though small, of 1,196 per acre. No addition was made to the Kyetpyugan plantation.

(c) Taungya Plantations.

Taungya plantations in the Prome division.

25. In the Prome division in all 92·9 acres were planted up. In the Chaungzauk reserve 62·9 acres cost Rs. 793-14-0, or nearly Rs. 12-10-0 per acre. The yas were sown with a mixture of teak and cutch; in the Tindaw reserve 27½ acres were stocked with teak and cutch at a cost of Rs. 12-13-4 per acre; and 2½ acres of pure cutch yas were formed in the Satsuwa reserve at a cost of Rs. 12-3-2 per acre. All these taungyas are well stocked, having an average of 1,200 plants to the acre.

Tharrawaddy division taungya plantations.

26. In the Tharrawaddy division the area of taungya plantations amounted to 1,350 acres and the cost to Rs. 15,079-10-0, or Rs. 11-2-9 per acre, with an average number of 989 plants per acre. For further details see Form 52 A.

Rangoon division teak taungyas.

27. In the South Zamayi reserve, Rangoon division, 276 acres have been planted up with teak by the Karens. The total cost has been Rs. 2,389-6-6, or Rs. 8-10-6 per acre, and the average number of seedlings at the end of the rainy season was found to be 641 per acre. Some of these plantations are not altogether satisfactory; the seedlings in the yas of Myatne and Pauktu tès, 143 acres in extent, are small and those of Pauktu tè do not contain an average of 500 plants per acre.

Teak yas in the Toungoo division.

28. In the Toungoo division 22 acres were planted up in the Saing-Yanè reserve and 70 acres in the Kabaung reserve. The former cost Rs. 10-5-3 per acre and contain an average of 765 teak seedlings, and the latter Rs. 6-1-4 with 566 seedlings.

29. Another attempt was made in the Kyaundaung reserve, Shwegyin division, and about 25 acres were sown with teak seed. The result is again failure; rats did considerable damage both to the teak and paddy crops. The only expense incurred was Rs. 30 for collection of teak seed.

Plantation in the Shwegyin division a failure.

30. The total area of new taungya plantations amounted to 1,810·9 acres, an increase of 833 acres upon the previous year. The total cost was Rs. 19,563, or Rs. 10-12-10 per acre, with an average number of 874 seedlings.

Summary for the circle.

31. In the Kôn-Bilin and Thônzè reserves, where the bamboo flowered the previous year, teak seed was sown at a cost of Rs. 693-14-0. The result is not successful, probably owing to insufficient care having been taken to remove the young bamboo and thereby give the teak light and air.

Dibbling in flowered bamboos.

32. Some very poorly stocked taungya plantations of 1883 in the Kangyi reserve were cleared and re-sown with cutch. The plants are very small and the seed was sown too late.

7.—*Cutting Creepers, Weeding, and Thinning.*

33. In clearing and cutting the creepers over 635 acres of old taungya plantations in the Prome division an outlay of Rs. 1,014, or Rs. 1-9-7, per acre, was incurred.

Weeding of taungya plantations.

The weedings and clearings in the Tharrawaddy division embraced an area of 5,231 acres of old plantations and cost Rs. 11,225-9-9. The work has been generally fairly done, but in some cases sufficient attention was not paid to the cutting of small creepers in the younger plantations, and in the older ones to the cutting back of bamboos when encroaching on and over-topping the young teak.

Similar operations were conducted in the Rangoon division, and the Magayi and Kyetpyugan regular plantations, together with the taungya plantations in the South Zamayi, were cleared of creepers and rank growth.

In the different reserves in the Toungoo division 1,163 acres of regular and taungya plantations were cleared of creepers and over-growth wherever necessary and involved an outlay of Rs. 607-0-9.

34. The Working Plans party cut all creepers in the sample plots counted out by them during the year, and the girdling parties in the Kôn-Bilin and Kadin-Bilin reserves expended Rs. 110-12-6 in cutting creepers and felling and girdling trees of inferior species which interfered with young teak. Scarcity of labour and the want of proper supervision prevented this work from being carried out by the girdling parties in the Thônzè and Môkka blocks.

Works of improvement by Working Plans and girdling parties.

8.—*Experiments and Exotics.*

35. Nothing of particular interest has to be recorded under this head.

A new vanillerie has been erected at Magayi and 534 cuttings planted in it. The plants in the old vanillerie flowered very sparsely and produced only 12 pods.

Vanilla.

Six cuttings have been successfully struck this year.

Ficus elastica and *Mysuriensis*.

36. The Tharrawaddy forest garden contained the following exotics at the close of the year:—

Forest garden at Tharrawaddy.

Eucalyptus citriodora	2
Pomaderris elliptica	1
Tristanea conferta	4
Ficus elastica (including nine planted out last rains) ...	29
Morus multicaulis	18
Vanilla	9
Pithicolobium saman	380
Mahogany	444
Divi-divi	805
Ceara rubber	584

The only exotics raised from seed during the year were 73 *Pithicolobium* and 29 mahogan. Of 20 cuttings taken from the *Ficus elastica* nine succeeded. The expenditure on the garden during the year was—

	Rs.	A.	P.
Labour	882	5	0
Fence	21	8	0
Manure	8	10	0
Sinking of well	47	8	0
Sundries	16	8	0
Total ...	975	13	0

Thandaung plantation.

37. Rupees 15 were spent in clearing the coffee at Thandaung; nothing was done to the cinchona. The proposal to form a sanitarium there has been abandoned, and it would not repay the cost to bark and sell the cinchona. The area should be struck off the list of cinchona plantations.

9.—Communications and Buildings.

(*a*) *Roads, Bridges, and Streams.*

Portable tramways unnecessary.

38. The question has been raised as to the advisability of the introduction of portable tramways for the extraction of forest produce. Up to date in this circle nothing has been done, nor is it at all probable that for many years to come such undertakings will prove financially successful.

Cart tracks cleared and improved, and streams opened out.

39. The cart tracks through the Bwet and Bawbin reserves have been improved, the ruts filled in, and gradients lessened where necessary at the small cost of Rs. 260. In the Toungoo division tracks have been cleared to expedite communication. Two bridges on the Palun and Kimpadi road have been renewed at a cost of Rs. 683-8-0. In the Tharrawaddy division the Shwelè canal, mentioned in paragraph 43 of last Annual Report, was completed at a cost of Rs. 1,345-12-9. The bunds have stood well and the canal greatly facilitated the extraction of some 2,000 logs. The escapes which were closed on the Taungnyo streams again opened and the surrounding paddy-lands were flooded. Fresh bunds are being thrown up and the neighbouring villagers have volunteered to assist in the work. At last they recognize it is to their advantage to keep the stream within its proper limits, and this will, it is hoped, help to prevent the wilful breaching of the bunds. The Minhla and Gamôn streams were cleared of small obstructions at a cost of Rs. 281-8-0, and in the Rangoon division the blasting party completely opened out the Kyunwi chaung and its feeders. The expenditure incurred during the season amounted to Rs. 836-13-9. This same party commenced operations in the Pyu chaung (Toungoo division) and removed one large obstruction, consisting of a series of immense boulders varying from 70 to 100 tons, which lay scattered between rocky walls along about 150 to 200 yards of the stream. The work was stopped by an accident to the blasting overseer, who lost his right hand. This blasting has been carried out entirely at the expense of the contractors working the forests.

(*b*) *Buildings.*

40. For the accommodation of the ranger quarters have been built at Kadinngazin in the Prome division at a cost of Rs. 338-2-0, and a new depôt house at Toungoo for the overseer cost Rs. 300. No new rest-houses have been constructed. The ordinary repairs to the bungalows, offices, &c., in the different divisions have been carried out. The annual repairs to the buildings at the Government timber depôts at Rangoon involved an outlay of Rs. 1,474-4-0.

CHAPTER IV.

YIELD AND WORKING.

1.—Departmental Operations.

Departmental extraction of teak.

41. The season's outturn from the different divisions amounted to 57,708 teak logs and pieces, and the usual information is shown in the following table:—

Division.	Number of logs extracted during the year.	Local disposals.	Sent to Rangoon.	Arrived at Rangoon.	Average Rate per log paid to Contractors.	Average Cubic contents per log.
					Rs. A. P.	
Prome ...	1,027	81	878	896	12 7 5	50
Tharrawaddy ...	13,347	9	13,338	13,338	9 10 10	51
Rangoon ...	5,949*	37	5,912	5,877	12 9 9	50
Toungoo ...	8,688	601	8,087	6,726	21 8 1	57
Shwegyin ...	572	264	310	311	...	46
Western ...	120	120	...	...	...	24
	29,703	1,112	28,525	27,148	...	...
	Refuse and small logs.					
Prome	119	119	...	...	2 14 10	24
Tharrawaddy ...	27,886	29,889	...	...	2 11 8	19
	57,708	31,120	28,525	27,148	...	...

* Includes 154 logs delivered at Rangoon as drift timber.

The above includes 298 teak logs from the Malun, Thayet, and Mindôn-Taungzin forests, timber left by the former lessees. The neaped timber in the different streams in the Prome, Tharrawaddy, and Toungoo streams amounted to over 10,100 logs. The sudden and early close of the rainy season accounts for this.

Departmental extraction of other woods.

42. From the Rangoon forests 306 logs (238 tons) of pyinma were delivered at Pegu; 20 pyinkado logs were extracted for and made over to the Rangoon Jail. Contractors in the Shwegyin division floated out 229 logs (490 tons) of kanyin and received half of the timber in payment for the work done. The Western division undertook no contracts. The Bassein Jail demand has ceased altogether.

Outstandings against contractors.

43. At the close of the year the liabilities of timber contractors to the department amounted to Rs. 43,513-9-7 made up as follows:—

	Rs. A. P.
Prome division	4,009 8 0
Tharrawaddy division	16,903 9 6
Rangoon division	100 0 0
Toungoo division	22,492 13 1
Western division	8 0 0

The Shwegyin division has no outstandings, those in Prome are more than covered by mortgaged elephants and work done. The Tharrawaddy debts are secured by work done to the value of Rs. 14,450 and mortgaged elephants Rs. 9,900. The Rangoon divisional outstanding calls for no remark. The Toungoo division shows the large debit balance of Rs. 22,492-13-1. The Divisional Officer remarks these are all well secured with the exception of Rs. 817-6-9. The latter amount is irrecoverable. The Western division has now almost a clean balance sheet. During the year Rs. 2,163 were written off to profit and loss.

2.—*Removal of Produce by Purchasers.*

(*a*) *Timber.*

Extraction from reserves.

44. From reserves in the Prome division 511 cutch trees were sold to boilers for Rs. 950 and Rs. 11,951-4-0 were obtained by the sale of 4,491 cutch-trees from the Tharrawaddy reserves. One thousand one hundred cubic feet pyinma and 131·7 cubic feet thingan were also extracted from the latter, realizing Rs. 295-8-0. From the Kyunchaung reserve, Rangoon division, 19,000 cublic feet kanyin were worked out upon payment of Rs. 2,280.

In addition to the above, principally for the supply of Rangoon town, the following quantity of unreserved timber was extracted under special licenses from the reserves adjacent to the railway :—

Reserve	Pyinkado.	In.	Thayet.	Thiya	Hnaw	Revenue.
	Logs					
						Rs A P
Magayi ...		1,000	...	.	...	3,000 0 0
Thabyu ...	3,480	4,373	800	105	...	23,158 12 0
Thatpyat ...	18	444	..	..		1,422 4 0
Kyunchaung	20	200	250	...	11	1,176 8 0
Hmawbi	50	.	...			150 0 0
Total ...	3,568	6,007	1,050	105	11	28,907 8 0

Reserved woods from unreserved forests.

45. The quantity of timber of the reserved kinds from unreserved forests shows generally an increase upon last year's extraction and was as follows :—

Division.	Teak	Pyinma	Thingan and kaung-hmu	Kanyin	Thitkado	Thitka	Revenue.
	Cubic feet.						
							Rs A. P
Prome ...	32,900	...	...	.	...	.	8,631 0 9
Tharrawaddy	21,300	2,186	609	125	...		4,845 12 8
Rangoon	...	1,906	825	1,319	...	1,450	888 9 7
Toungoo	11,100	1,000	23,735	...	15	100	5,608 3 9
Shwegyin	2,000	3,922	6,121	86,769	188		7,913 2 0
Western	4,750	5,326	175	5,249	200	1,250	4,181 11 2
Total C. feet	72,050	14,340	31,455	93,462	403	2,800	32,018 7 6
Total Tons ...	1,441·0	286 8	629 1	1,869·2	8	56	

Unreserved woods from unreserved forests.

46. The number of logs of the unreserved kinds and the revenue realized in each division may be gathered from the following table :—

Division	Dugyis and hlwazas.	Yathits.	Posts.	Poles.	Revenue.
					Rs A. P.
Prome	6,754	22,862	18,474	20,695	29,069 14 4
Tharrawaddy	8,147	8,024	608	...	11,089 8 6
Rangoon	2,950	5,537	6,265	300	9,015 11 3
Toungoo	6,523	4,053	1,097	7,763	12,920 6 10
Shwegyin	6,458	3,181	11,442	2,025	18,001 7 9
Western	12,010	14,160	29,966	343,100	85,016 4 0
Total ...	37,842	57,817	67,852	373,883	1,10,063 4 8

In addition Rs. 3,072-10-1 were collected upon unreserved woods in the Arakan Commissionership. The total quantity extracted shows a large increase upon the previous year although the export of pyinkako sleepers to India has materially diminished.

(*b*) *Minor Forest Produce.*

Minor forest produce from reserved forests.

47. The revenue realized by the extraction of minor forest produce from reserves amounted to Rs. 38,742 and the details are given in the statement below.

Cutch again forms the principal item. The revenue upon bamboos also shows a slight increase.

Division.	Cutch.	Bamboos.	Shaw bark.	Grazing.	Cigar-leaves.	Laterite and limestone.	Wood-oil.	Thatch grass and salu.	Canes	Honey.	Fuel.	Miscellaneous.	Total revenue.
													Rs.
Prome ...	8,420	...	49	...	...	...	...	1	...	...	...	...	8,470
Tharrawaddy	24,358	2,058	82	126	157	...	...	7	...	47	4	...	26,784
Rangoon ...	...	2,708	258	97	...	37	...	22	82	...	...	11	3,160
Toungoo ...	...	174	9	...	...	20	20	...	87	85	...	...	295
Shwegyin ...	...	33	...	...	...	...	...	...	...	...	...	...	33
Total ...	32,778	4,973	348	223	157	57	20	30	69	82	4	11	38,742

Minor forest produce from unreserved forests.

48. The revenue collected from unreserved forests upon minor forest produce amounted to Rs. 1,34,107, or a falling-off of Rs. 40,799. The cutch in the forests outside reserves, both in the Thayetmyo and Prome districts, is exhausted and the decrease upon cutch licenses was Rs. 52,070. A still further diminution must be expected next year. The collections upon firewood at Rangoon show an increase of Rs. 10,984:—

Division.	Cutch.	Charcoal.	Fuel.	Resin.	Wood-oil and thitsi.	Total revenue.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Prome ...	93,950	182	...	208	4	94,344	
Tharrawaddy ...	16,060	129	19	...	100	16,308	
Rangoon ...	...	302	...	...	64	366	
Toungoo ...	1,820	142	71	2	584	2,619	
Shwegyin ...	...	205	...	...	282	487	
Western ...	2,400	128	...	...	12	2,535	
Agency ...	...	...	17,498	...	...	17,498	Duty upon Rangoon fuel.
Total ...	1,14,230	1,088	17,588	210	996	1,34,107	

3.—Free Grants.

Free grants of timber.

49. The Commissioners of Divisions and Conservator granted for religious and generally useful purposes free licenses for 101 tons refuse and windfall teak and 137 tons of other woods of the reserved kinds.

4.—Summary of Outturn.

Total outturn from all divisions.

50. The outturn of the different divisions will be found in detail in Appendix O.

The following is a summary of the outturn of timber :—

How extracted.	Teak.	Other reserved woods.	Unreserved woods.	Bamboos.
	Tons.	Tons.	Tons.	No.
By Government agency	41,632	758	12	...
By purchasers	1,441	3,254	90,852	1,989,000
By right-holders	...	...	199	38,000
Under free grant	101	137	...	...
Total ...	43,174	4,144	91,063	2,027,000

The outturn of timber under all heads shows a satisfactory increase. The paddy-field teak has again contributed materially to the increase of 12,474 tons. Reserved woods show an increase of 1,316 tons and unreserved woods of 10,419 tons.

5.—*Drift Operations.*

Collection of drift timber.

51. The usual statement showing collection and disposal of drift timber in the different divisions follows :—

Division.	Balance, 1887-88.	Collected during 1887-88.	Returned to claimants.	Sold.	Drifted or used departmentally.	Transferred to other departments.	Balance.
Prome	146	1,301	1,182	90	7	103	115
Rangoon	...	753	...	...	...	753*	...
Toungoo	...	7,314	7,237	75	2	...	...
Shwegyin	30	3,907	3,623	171	1	...	142
Western	27	1,014	406	231	...	...	404
Agency	111	1,496	1,395	154	...	...	58
Total ...	314	15,785	13,793	721	10	856	719

* Delivered at Government depôt.

Twenty-one logs waif were dug up in the Mindôn chaung and brought to the Nawin depôt, Prome division. Seventy-six waif logs were collected in the Toungoo division, 26 were sold locally, and 50 sent to the timber depôt at Rangoon.

6.—*Girdling.*

Teak girdlings.

52. In unreserved forests the following teak girdlings took place :—

		Trees.	
Prome division	Nawin range	1,000	
	Myedè range	756	
	Kama range	600	
			2,356
Toungoo division	Thagaya range	857	
	Zeyawadi range	3,509	
	Bônmadi range	2,509	
			6,875
Shwegyin division, Baingda forests			600
	Total ...		9,831

In the Tharrawaddy division the girdlings inside reserves were carried out in accordance with the sanctioned plans. The number in the Thônzè forests fell short of the sanction by 694 trees as to have girdled more would have been inconsistent with the provisions of the plan. In the Kôn-Bilin 500 trees, Kadin-Bilin 2,000 trees, and in the Môkka 200 trees were girdled.

Fifteen hundred trees were girdled in reserves in the Rangoon division, 500 in the North Zamayi Karen area and 1,000 in the Kadat reserve. The girdling in the Kadat reserve was carried out under the personal supervision of the Divisional Officer and with a due regard to the sylvicultural requirements of the forests. It will be years before working plans can be framed for these forests, which contain hundreds of trees of such dimensions that they can be with difficulty extracted. Of the 1,000 trees girdled by Major Bingham—

56 exceeded 11 feet in girth; 847 were from 8 feet to 10 feet 11 inches; 272 were from 7 feet to 7 feet 11 inches; 297 above 6 feet 6 inches.

7.—*Disposals and Sale Depôts.*

Local sales.

53. The Prome local sales were limited to the disposal of 73 refuse teak logs from the Dathwegyauk forests and 48 inferior contractors' logs. In the Tharrawaddy division nine teak logs (9½ tons) were disposed of for Rs. 380-15-3 and 152 refuse teak logs were sold for Rs. 544-8-0. From the different railway depôts 29,737 paddy-field teak logs containing 11,187 tons were sold and realized Rs. 1,05,599-9-1. The average cost of delivery of this timber amounted to Rs. 2-11-6 per log and the average proceeds to Rs. 3-8-10 per log, or a profit of Rs. 0-13-4 per log.

At Pegu in the Rangoon division 42 logs of teak (37 refuse and 5 drift), averaging a ton per log, were sold for Rs. 2,197-2-6. Three hundred and two logs (238·5 tons) of pyinma were disposed of for Rs. 5,813, or Rs. 24-6-0 per ton, and 52 confiscated logs of thitka and kanyin (31·2 tons) realized Rs. 260, or Rs. 8-5-4 per ton. From the Toungoo depôt 678 teak logs were sold for Rs. 12,883-7-9 and five confiscated logs realized Rs. 7-8-0. Two hundred and thirty-one kanyin logs (493 tons) were disposed of locally at the Shwegyin depôts for Rs. 1,861-2-1. The local sales in the Western division were as follows:—

	Rs.	A.	P.
120 teak logs realizing	2,765	0	0
186 pyinkado realizing	1,725	0	0
4,022 pyinkado slabs, &c., realizing	148	11	10
111 kanyin logs realizing	736	12	11
2 kashit logs realizing	9	12	9

Timber depôt at Rangoon.

54. The operations of the Central depôt at Rangoon may be gathered from the following statement:—

Description.	Balance on 1st April 1888.		Arrivals during the year.		Sales and disposals during the year.		Balance on 31st March 1889.	
	Logs.	Tons.	Logs.	Tons.	Logs.	Tons.	Logs.	Tons.
Teak	19,313 44*	17,576	27,148	29,728	28,895	28,806	19,091 44*	18,528
Drift teak	41	80	1,484					
Woods of other kinds ...	31	...	4	16	12	10	4	8
Drift of other kinds ...			12					

* Sleepers.

Compared with the previous year the arrivals of teak were 5,821 tons in excess. The balance on hand at the close of the year exceeded that of the previous year by 922 tons.

Summary of sales from Rangoon depôt.

55. Excluding the revenue obtained from salvage on 1,395 logs, amounting to Rs. 5,097-5-0, the sales at the Government depôt realized Rs. 13,76,449-1-0.

			Rs.	A.	P.
Auction sales, teak logs	15,812	... ...	6,62,738	0	0
Indent sales, teak logs	12,046	... ...	7,09,258	1	0
Drift sales, teak logs	154	... ...	4,453	0	0

The average rate obtained for teak amounted to Rs. 49-13-4, or an increase of Rs. 8-6-5 per ton upon the previous year.

Stock of timber at depôt at close of year.

56. The stock on hand at the close of the year at the Rangoón depôt has been classified as 558 I class, 18,533 II class, and 44 sleepers. The timber is better in quality than that left from the previous year and may be fairly valued at Rs. 36-8-0 per ton, or Rs. 6,74,000, a difference in favour of the year of Rs. 57,800.

CHAPTER V.

EXPORT OF TIMBER.

Exports of timber, &c., from Rangoon.

57. The exports of teak from Rangoon show an increase of 10,552 tons upon last year and amounted to 62,969 tons valued at Rs. 48,99,547, or Rs. 77-13-0 per ton. The exports to the United Kingdom form the chief item of increase, while those to Ceylon have fallen off by 6,300 tons. The decrease in the quantity exported from Moulmein during the year accounts most probably for the increased activity at Rangoon.

The quantity of cutch exported amounted to 341,607 cwts., or some 20,000 cwts. less than in the previous year. A more serious decrease must be expected next year as the cutch forests become more and more exhausted. Further details as to the export of forest produce are given in Appendix C.

CHAPTER VI.

FINANCIAL RESULTS.

Financial results of the year's working.

58. The financial results of the year's working are as follows:—

	Rs.	A.	P.
Revenue	19,39,482	12	8
Expenditure	8,06,193	4	9
Surplus	11,33,289	7	6

The cost of the forest survey party, estimated at Rs. 51,000, is not included in the expenditure. As it stands the surplus this year exceeds that of 1887-88 by Rs. 1,61,514-8-8.

Comparison with previous years.

59. Compared with the previous three years the figures stand—

	Revenue. Rs.	Expenditure. Rs.	Surplus, Rs.
1885-86	15,54,616	8,32,438	7,22,178
1886-87	14,97,355	6,55,174	8,42,181
1887-88	16,75,094	7,03,320	9,71,774
1888-89	19,39,483	8,06,193	11,33,290

Detailed comparison with previous year.

60. The sales of timber worked out departmentally yielded Rs. 15,06,247 against Rs. 12,57,556 in 1887-88, and the corresponding expenditure amounted to Rs. 4,74,583 compared with Rs. 4,13,416, showing a balance in favour of the year's working of Rs. 1,87,524.

61. The receipts for timber and forest produce extracted by purchasers and consumers amounted to Rs. 3,63,516 and the outlay to Rs. 7,110 against Rs. 3,53,344 and Rs. 7,899 respectively. The collections for cutch-boiling show a falling-off of Rs. 48,808. Upon all other articles there was a satisfactory increase.

62. The result of drift operations shows an increase of Rs. 6,363 revenue and an increase of Rs. 4,078 expenditure, calling for no special remark.

63. Miscellaneous collections realized Rs. 15,013 against Rs. 12,316 in the previous year and the expenditure amounted to Rs. 5,381 as against Rs. 2,503 in 1887-88. The expenditure is higher consequent upon irrecoverable outstandings in the Western division having been written off to profit and loss.

64. The expenditure upon live-stock, stores, &c., amounted to Rs. 20,298 against Rs. 23,751 last year. The saving is accounted for by no new elephants having been purchased.

65. Under Communications and Buildings the outlay was Rs. 12,291 against Rs. 5,786. The increase is due to the erection of Rangers' quarters in the Prome division and to establishment employed to protect the railway bridges in the Tharrawaddy division.

66. The expenditure upon demarcation, improvement, and extension of forests increased from Rs. 41,950 to Rs. 61,824. The outlay upon new plantations and clearing the older ones amounted to Rs. 36,383 against Rs. 25,420 in the previous year. The area planted up increased by 833 acres and a greater area of old plantations was weeded.

The expenditure upon working plans shows an increase of Rs. 5,588 in consequence of payments for the season of 1887-88 not having been made until after the close of last official year. Fire-protection also increased in cost as has the area fire-traced.

67. The charges under Establishment increased by Rs. 12,613. Pay of superior officers accounts for Rs. 10,163 in consequence of promotion and addition of two juniors. Travelling allowances exceeded the previous year by Rs. 2,207, chiefly to superior officers. The disbursements upon contingencies show a small reduction of Rs. 95.

Revenue and expenditure arranged according to divisions.

68. The revenue and expenditure arranged according to the different divisions are as follows :—

Division.	Revenue.			Expenditure.	Surplus.
	Collected locally.	Agency collection.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Tharrawaddy	1,82,484	6,29,775	8,12,259	3,19,899	4,92,860
Rangoon	54,160	3,55,940	4,10,100	1,87,005	2,78,095
Prome	1,56,921	78,506	2,30,427	61,504	1,68,923
Toungoo	58,023	2,99,854	3,52,877	2,21,789	1,31,088
Western	56,673	1,433	58,106	31,578	26,528
Shwegyin	35,961	12,202	48,163	30,986	17,177
Agency	.....	27,551	27,551	3,932	23,619
Total ...	5,39,222	14,00,261	19,39,483	8,06,193	11,33,290

Summary of receipts and charges.

69. The summary of receipts and charges compared with the last two years is as follows :—

	Receipts.			Charges.			Surplus or deficit.					
	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.		1887-88.		1888-89.	
							Surplus.	Deficit.	Surplus.	Deficit	Surplus.	Deficit
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Departmental timber operations.	12,66,189	13,05,807	15,60,954	4,96,621	5,34,259	6,06,050	7,69,568	...	7,71,548	...	9,54,904	...
II Other revenue	2,31,166	3,69,287	3,78,520	67,740	65,698	70,417	1,63,426	...	3,03,389	...	3,08,112	...
III.—Formation and improvements.	...	...	...	90,813	1,03,163	1,29,726	...	90,813	...	1,03,163	...	1,20,726
Total ...	14,97,355	16,75,094	19,39,483	6,55,174	7,03,320	8,06,193	8,42,181	...	9,71,774	...	11,33,290	..

General.

70. The teak markets in Europe and India were dull for the greater part of the year. Towards the close a slight improvement took place, probably owing to the expected demand for teak by the Admiralty.

Teak market.

71. The adulteration of cutch with *than* assumed such proportions that in the interests of the trade *than* was declared to be a reserved tree.

Than declared a reserved tree.

72. To provide employment for the men who had been earning a livelihood by than-boiling the Tindaw and Satsuwa cutch reserves were thrown open to cutch-boilers. These reserves have been cleared of marketable cutch trees and, notwithstanding a large staff of temporary guards, undersized trees have been felled everywhere. Many men were punished, but this had little or no effect.

Tindaw and Satsuwa cutch reserves thrown open to provide employment for than-boilers.

73. The selection of the paddy-field teak clumps having been completed in the Tharrawaddy district, permission has been granted to fell and utilize without a license any teak below 3 feet in girth standing in potta-lands on the plains. Such timber if brought out to a revenue station has, however, to pay duty at the rate of Rs. 10 per ton.

Relaxation of teak restriction on potta-lands in Tharrawaddy district.

74. There were 35 elephants in the circle at the commencement of the year. No purchases were made. Two died, leaving a balance of 33. The average monthly cost per animal amounted to Rs. 39-10-10.

Elephants.

75. The launch was employed by the Conservator while inspecting river stations on the Irrawaddy and in towing timber to and from the depôt. This work occupied her 39 days, or 342 hours under steam. Her earnings for the year amounted to Rs. 349, and the cost of her establishment, &c., to Rs. 1,974-12-0.

Steam-launch *Forester*.

76. The following indents for seed were complied with :—

Indents for seed, &c.

Deputy Conservator of Forests, Andamans, for 2 maunds teak seed.
Chief Commissioner, Andamans, for a small quantity of (tinwa) bamboo seed.
Conservator of Forests, Berar, for 43 maunds bamboo seed.
Conservator of Forests, Southern Division, Madras, for 2 maunds bamboo seed.

77. The circle throughout the year was in charge of the writer of the report. All gazetted officers have merited the thanks of the Conservator for the manner in which they have performed their duties. The health of officers has not been good. Major Bingham, Mr. Nisbet, and Mr. Thellusson have suffered from fever, &c.

Controlling staff.

78. Sub-Assistant Mr. Allan has worked hard and well. Maung Kalè has been ill for the greater part of the year. Rangers Maung Yaing and Maung Wè have displayed zeal and energy. The subordinate executive establishment generally has not given satisfaction. There is no doubt the present sanctioned permanent staff cannot satisfactorily perform the work in some divisions and must be increased. Too much of a ranger's and other subordinates' time is occupied in attending Court to give evidence in forest cases and the legitimate work suffers. One forester was sent to jail for five years for taking bribes, a revenue overseer was sentenced to 2½ years for cheating, and a Burmese clerk to six years and Rs. 259-12-0 fine for criminal breach of trust.

Executive staff.

79. Office establishments have worked satisfactorily. The Superintendent of the Conservator's office, Mr. Buchanan, and Mr. Allmark have rendered the Conservator valuable assistance.

Office and agency.

RANGOON :
The 28th June 1889.

E. P. POPERT,
Conservator of Forests, Pegu Circle.

APPENDICES.

ANNUAL FORM NO. 49 [PRESCRIBED].—*Area of Reserved Forests in the Tenasserim and Pegu Circles for the year 1888-89.*

Division	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889		No. and date of notification of addition or transfer.	Remarks
				Acres.	Equivalent in square miles.	Acres	Acres	Acres.	Equivalent in square miles.		
West Salween	West Salween	Salween ...	Wamu chaung	1,920	3	...	..	1,920	3		
			Sinzwè	8,960	14	...	...	8,960	14		
			Kahlu	9,600	15	...	...	9,600	15		
			Minnanwè	3,840	6	...	...	3,840	6		
			Mèwaing	7,360	12	...	...	7,360	12		
			Upper Mèthalauk ...	8,960	14	...	...	8,960	14		
			Lower Mèthalauk ...	3,840	6	..	..	3,840	6		
		Shwegyin ...	Bilakatkyi	8,320	13	..	...	8,320	13		
			Onkangyi	8,320	13	..	...	8,320	13		
		Amherst	Tagalaung	5,120	8	...	...	5,120	8		
		Salween ...	Pachaung	25,600	40	..	...	25,600	40		
			Dagwin	6,400	10	...	...	6,400	10		
East Salween.	East Salween.	Amherst ...	Kamawkala	5,760	9	...	..	5,760	9		
			East Mèpalè	38,400	60	...	...	38,400	60		
			Metkane	17,280	27	...	...	17,280	27		
			Mèpalè	25,600	40	.	...	25,600	40		
			Kyaukket	12,160	19	.	...	12,160	19		
			Mezala	6,400	10	...	...	6,400	10		
			Winsaw	6,400	10	...	...	6,400	10		
			Mithawè	12,160	19	...	...	12,160	19		
			South Myawaddi	150	...	.	.	150			
			Onkaraing	33,920	53	...	...	33,920	53		
			Gawlè	37,120	58	..	...	37,120	58		
			Baledo	1,600	2	..	...	1,600	2		
Attaran .	Attaran ...	Amherst ...	Dali	7,680	12	...	...	7,680	12		
			Pakabo	20,480	32	..	...	20,480	32		
			Natchaung	5,760	9	..	...	5,760	9		
			Gangyi	27,520	43	..	...	27,520	43		
			Ma-u	8,960	14	...	..	8,960	14		
			Me-wa	12,160	19	...	...	12,160	19		
			Thingannyinaung ...	5,760	9	...	...	5,760	9		
			Kyunchaung	10,880	17	...	...	10,880	17		
South Tenasserim.	Tavoy ..	Tavoy ...	Yè	202,880	317	...	...	202,880	317		
			Mintha	64,000	100	...	...	64 000	100		
	Mergui	Mergui	Kalemaung	294,400	460	...	...	294,400	460		Includes Karen area of 12 square miles.
			Ngawunchaung	192,000	300	...	..	192,000	300		
			TOTAL TENASSERIM CIRCLE...	1,147,670	1,793	.	.	1,147,670	1,793		
			A.—CLASSED STATE FORESTS AND WASTE LANDS.								
			(a) Reserved Forests.								
	Myedè ...	Thayetmyo district	Tindaw	2,880	5	...	...	2,880	5		
			Satsuwa ...	4,800	7	...	...	4,800	7		
			Thayetmyo, East Yoma ...	71,680	112	...	...	71,680	112		
	Kama ...	Ditto	Saingdo	1,216	2	...	...	1,216	2		
			Thabala	6,080	9	...	...	6,080	9		
			Mindon Yoma	166,400	260	...	...	166 400	260		
			Ngawet ...	3,200	5	..	..	3,200	5		
			Total Thayetmyo ...	256,256	400	...	...	256,256	400		

PRO			Thitkat and Ayodaung ...	2,944	5	...	...	2,944	5	
			Thayetchaung and Nyaungbindet.	4,864	8	...	...	4,864	8	
			Kywèmido	2,442	4	...	...	2,442	4	
			Nabèbyu	3,840	6	...	...	3,840	6	
			Shwelaung and Pwegyin ...	13,120	21	...	...	13,120	21	
			Gwègyo	6,720	10	...	...	6,720	10	
			Chaungzauk	9,408	15	...	...	9,408	15	
	Nawin ...	Prome district	Ngaluzan	700				700		
			Shwekyundaw	256	2	...	...	256	2	
			Prome plantation ...	73				73		
			Prome, East Yoma ...	97,600	152	...	...	97,600	152	..... Includes Karen area of 43 square miles.
			Tónyè fuel reserve ...	12,224	19	...	...	12,224	19	
			Pauktaw fuel reserve ...	4,672	7	...	...	4,672	7	
			Sinmizwe fuel reserve ...	6,400	10	...	...	6,400	10	
			Total ...	165,263	259	...	...	165,263	259	
			Total Prome division ...	421,519	659	...	...	421,519	659	
			Karen areas ...	27,520	43	...	...	27,520	43	
			Total area free of taungya privileges.	393,999	616	...	...	393,999	616	
			Shwele Yoma	33,600	52	...	...	33,600	52	..... Includes Karen area of 12 square miles.
			Dawlè	1,600	3	...	...	1,600	3	
			Padetmyaung	4,500	7	...	...	4,500	7	
			Kyaukkyitaung	2,600	4	...	...	2,600	4	
			Bwet	2,900	5	...	...	2,900	5	
	Shwele ...	Prome district	Gwedaukkyin	10,200	16	...	...	10,200	16	
			Kyibyu	2,200	3	...	...	2,200	3	
			Kadinzauk and Kadinthôn-zin.	3,500	6	...	...	3,500	6	
			Shabaung	2,200	3	...	...	2,200	3	
THARRAWADDY.			Tarôkmaw and Inma ...	24,576	38	...	...	24,576	38	..... Partly in Tharrawaddy district.
			Taungnyo Yoma	88,320	138	...	...	88,320	138	..... Includes Karen area of 36 square miles.
			Upper Padinbin	600	1	...	...	600	1	
			Lower Padinbin	200	...	...	...	200	...	
			Tapun	4,260	7	...	...	4,260	7	
			Nyaulè	4,518	7	...	...	4,518	7	
			Kanni	595	1	...	...	595	1	
			Pazingyi	1,325	2	...	...	1,325	2	
			Taungnyomyo	4,780	8	...	...	4,780	8	
			Minlu	14,003	22	...	...	14,003	22	
	Bawbin ...	Tharrawaddy district	Bawbin	65,594	102	...	...	65,594	102	..... Includes Karen area of 35·66 sq. miles.
			Upper Payagyi	704	1	...	...	704	1	
			Lower Payagyi	307	...	...	...	307	...	
			Thitcho	2,970	5	...	...	2,970	5	
			Kangyi	4,896	8	...	...	4,896	8	
			Gwedauksan	1,222	2	...	...	1,222	2	
			Chaungwa	1,504	2	...	...	1,504	2	
			Myodwin	38	...	...	...	38	...	
			Chaungzauk fuel reserve ...	3,454	5	...	...	3,454	5	
			Carried forward ...	287,366	448	...	...	287,366	448	

ANNUAL FORM NO. 49 [PRESCRIBED].—*Area of Reserved Forests in the Tenasserim and Pegu Circles for the year 1888-89*—concluded.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres	Area on 31st March 1889. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
THARRAWADDY—concld.			Brought forward ...	287,366	448	...	...	287,366	448		
	Gamôn ...	Tharrawaddy	Minhla	25,453	40	...	...	25,453	40	.....	Includes Karen area of 6·43 square miles.
			Gamôn	47,757	75	...	...	47,757	75	.....	Includes Karen area of 29·31 square miles.
			Taung	14,016	22	...	...	14,016	22	.....	Includes Karen area of 8·43 square miles.
			Taukkyan	3,138	5	...	...	3,138	5		
			Thakolan	1,134	2	...	...	1,134	2		
			Chaungnagôn	350	1	...	...	350	1		
			Satpôk (fuel)	5,276	8	...	...	5,276	8		
			Sitkwin (fuel)	3,080	5	...	...	3,080	5		
	Bilin ...	Ditto	Môkka	22,406	35	...	...	22,406	35	.....	Includes Karen area of 10·28 square miles.
			Kadin-Bilin	53,363	83	...	...	53,363	83	.....	Includes Karen area of 22·33 square miles.
			Kôn-Bilin	15,987	25	...	...	15,987	25	.....	Includes Karen area of 14·80 square miles.
			Thônzè	69,734	109	...	...	69,734	109		
			Thindawyo (fuel)... ...	6,551	10	...	...	6,551	10		
			Total Tharrawaddy division	555,611	868	...	...	555,611	868		
			Karen areas ...	112,043	175	...	...	112,043	175		
			Total area free of taungya privileges.	443,568	693	...	...	443,568	693		
GOON.	Paunglin	Hanthawaddy ...	Kyetpyugan	940	2	...	...	940	2		
	Kinbadi...	Ditto	Magayi	12,800	20	...	...	12,800	20		
			Ôkkan	80,000	125	...	...	80,000	125	.....	Includes Karen area of 13 square miles.
	Hlaing ...	Ditto ...	Hlaing Yoma	59,520	93	...	...	59,520	93		
			Total ...	153,260	240	...	...	153,260	240		
			Fuel Reserves.								
	Hlaing ...	Ditto	Hmawbi	1,846	3	...	...	1,846	3		
			Kyun	8,440	13	...	...	8,440	13		
			Thitpyat	1,280	2	...	...	1,280	2		
			Thabyu	8,000	13	...	...	8,000	13		
			Wanetchaung	5,280	8	...	530	4,750	7	Notification No. 113, dated 13th September 1888.	
			Total ...	24,846	39	...	530	24,316	38		

RAN	Pegu ...	Pegu ...	Upper Zamayi	145,920	228	...	...	145,920	228	.....	Includes Karen area of 88·5 square miles.
			Lower Zamayi	112,000	175	...	...	112,000	175	.....	Includes Karen area of 18·5 square miles.
			Kadat	64,000	100	...	...	64,000	100		
			Lerpan	10,880	17	...	...	10,880	17		
			Paunglin	68,480	107	...	...	68,480	107	.....	Includes Karen area of 7 square miles.
			South Zamayi extension ...	...	...	1,280	...	1,280	2	Notification No. 61F., dated 16th June 1888.	
			Total ...	401,280	627	1,280	...	402,560	629		
			Total Rangoon division...	579,386	906	1,280	530	580,136	907		
			Karen areas ...	81,280	127	...	...	81,280	127		
			Total area free of taungya privileges.	498,106	779	1,280	530	498,856	780		
TOUNGOO.	Thagaya	Toungoo ...	Saing-Yanè	70,440	110	...	...	70,440	110		
			East Swa	17,280	27	...	...	17,280	27		
			West Swa	38,400	60	...	...	38,400	60		
			Lônyan	10,880	17	...	...	10,880	17		
			Sabyin	26,240	41	...	...	26,240	41		
			Kyaukmasin	20,480	32	...	...	20,480	32		
			Gwethè	33,280	52	...	...	33,280	52		
			Myohla	...	...	12,160	...	12,160	19	Notification No. 162F., dated 20th November 1888.	
	Zeyawadi	Ditto ...	Bôndaung	25,600	40	...	...	25,600	40		
			Kabaung	220,800	345	...	...	220,800	345	.....	Includes Karen area of 65·5 square miles.
	Bônmadi	Ditto ...	Kanni	280	...	...	...	280	...		
			Pyunchaung	3,400	5	...	...	3,400	5		
			Gônwè	6,400	10	...	...	6,400	10		
	Kya-thaung-daung.	Ditto	Thandaung	12,025	19	...	...	12,025	19		
			Total Toungoo division...	485,505	758	12,160	...	497,665	777		
			Karen area ...	41,920	65	...	...	41,920	65		
			Total area free of taungya privileges.	443,585	693	12,160	...	455,745	712		
SHWEGYIN.	Sittang ...	Shwegyin ...	Kyundaung	960	1	...	...	960	1		
			Kyundaung extension ...	3,840	6	...	...	3,840	6		
	Kyaukkyi	Ditto	Binbye	6,400	10	...	...	6,400	10		
	Bawni ...	Ditto ...	Upper Kanyinmyaung ...	8,320	13	...	...	8,320	13		
			Lower Kanyinmyaung ...	28,800	45	...	...	28,800	45		
			Tôngan	20,480	32	...	...	20,480	32		
			Total Shwegyin division...	68,800	107	...	...	68,800	107		
PEGU CIRCLE TOTAL.	...	(a) Area free of taungya privileges		1,848,058	2,888	13,440	530	1,860,968	2,906		
	...	(b) Karen areas		262,763	410	...	...	262,763	410		
	...	(c) Area of (a) (b)		2,110,821	3,298	13,440	530	2,123,731	3,318		
TENASSERIM CIRCLE TOTAL.	...	(a) Area free of taungya privileges		1,139,990	1,781	...	...	1,139,990	1,781		
	...	(b) Karen areas		7,680	12	...	...	7,680	12		
	...	(c) Area of (a) (b)		1,147,670	1,793	...	...	1,147,670	1,793		
GRAND TOTAL LOWER BURMA.	...	(a) Area free of taungya privileges		2,988,048	4,669	13,440	530	3,000,958	4,689		
	...	(b) Karen areas		270,443	422	...	...	270,443	422		
	...	(c) Area of (a) (b)		3,258,491	5,091	13,440	530	3,271,401	5,111		

ANNUAL FORM NO. 50 [PRESCRIBED].—*Prosecutions for Breaches of Forest Rules during the year 1888-89.*

Forest division and civil district.	Cases pending from 1887-88.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of the year.	Remarks.
		Injury to forests by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.			
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
Attaran Division, Amherst District—															
(a) Reserved forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
(b) Unreserved forests	...	...	36	...	...	36	36	22	24	14	21	36	45	...	
East Salween Division, Amherst District—															
(a) Reserved forests	...	...	...	...	...	...	...	...	4	...	...	...	...	...	
(b) Unreserved forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
West Salween Division, Amherst District—															
(a) Reserved forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
(b) Unreserved forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Kado Division—															
Moulmein Town and Amherst district	...	...	...	...	160	160	160	160	187	...	...	160	187	...	
South Tenasserim Division, Tavoy District—															
(a) Reserved forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
(b) Unreserved forests	...	3	2	...	...	2	5	...	...	5	5	5	...	...	
Total Tenasserim Circle *	...	3	...	38	...	160	198	201	182	211	19	26	201	237	...	
Prome—															
Prome civil district	...	...	1	48	...	...	49	49	38	62	11	14	49	76	...	
Thayetmyo	...	...	...	37	...	...	37	37	34	58	3	5	37	63	...	
Total	...	...	1	85	...	...	86	86	72	120	14	19	86	139	...	
Tharrawaddy—															
Tharrawaddy district	...	...	...	11	...	...	11	11	10	10	1	1	11	11	...	
Prome district	...	2†	...	3	...	...	3	5	3	4	...	2	3	6	1	† One compounded.
Total	...	2	...	14	...	...	14	16	13	14	1	3	14	17	1	
Rangoon—															
Pegu district	...	...	...	...	...	2	2	2	2	2	...	...	2	2	...	
Hanthawaddy district	...	1	2	...	...	2	3	2	12	1	1	3	13	...	
Total	...	1	...	2	...	2	4	5	4	14	1	1	5	15	...	
Toungoo—															
Toungoo district	...	2	...	4	...	1	5	7	6	6	1	1	7	7	...	
Shwegyin—															
Shwegyin district	...	...	...	3	...	2	5	5	4	5	1	1	5	6	...	
Western—															
Bassein	...	...	...	18	...	...	18	18	14	18	4	5	18	23	...	
Henzada	...	...	...	4	...	...	4	4	3	6	1	2	4	8	...	
Myanaung	...	...	...	31	...	...	31	31	29	33	2	8	31	41	...	
Total	...	...	...	53	...	...	53	53	46	57	7	15	53	72	...	
Total Pegu Circle ‡	...	5	1	161	...	5	167	172	145	216	25	40	170	256	1	
GRAND TOTAL LOWER BURMA	...	8	1	199	...	165	365	373	327	427	44	66	371	493	1	

* Sixty-four cases were compounded under Rule 66 of the Forest Rules, Rs. 1,372-14-0 being paid as compensation.
‡ Three hundred and thirty-nine cases were compounded under Rule 66 of the Forest Rules, Rs. 6,825 were paid as compensation.

ANNUAL FORM NO. 51 [PRESCRIBED].—*Area of Forest Tracts protected from fire during the dry season of 1889.*

Division.	Forest tract.	Year in which protection commenced.	Area actually protected up to 15th June 1888.	During dry season of 1889.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	Tenasserim Circle.		Acres.	Acres.	Acres.	Acres.	Rs.	
West Salween	Sinzwè	1871	8,465	8,960	.....	8,960	1,778	
	Wamu	1871	1,900	1,920	.....	1,920	118	
	Kahilu	1878	2,560	2,560	.....	2,560	138	
	Mèwaing	1877	7,160	7,360	45	7,315	10	
	Minnaunwè	1878	3,840	3,840	.....	3,840	9	
	Ônkangyi	1877	310	6,300	20	6,280	131	
	Bilakatkyi	1877	2,663	6,656	3,568	3,288	45	
	Tagèlaung	1885	40	3,072	55	3,017	.....	
East Salween ...	West Mèpalè	1881	19,612	25,600	.....	25,600	1,913	
Attaran	Kyunchaung	1880	5,120	10,880	500	10,380	419	
	Dali	1878	99	151	10	141	266	
	Natchaung	1883	1,800	1,800	1,800	.....	109	
	Gòngyi	1889	.....	17	.....	17	15	
	Total ...	.....	53,599	79,116	5,798	73,318	4,961	

ANNUAL FORM NO. 51 [PRESCRIBED].—*Area of Forest Tracts protected from fire during the dry season of 1889*—concluded.

Division.	Forest tract.	Year in which protection commenced.	Area actually protected up to 15th June 1889.	During dry season of 1889.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	Pegu Circle.		Acres.	Acres.	Acres.	Acres.	Rs.	
PROME	Teak plantation	1857	55	75	75	.....	25	
	Chaungzauk reserve	1879	5,731	5,735	13	5,722	781	
THARRAWADDY	Bwet	1877	2,828	2,886	96	2,790	683	
	Gwedaukkwin	1886	500	2,000	1,975	25	315	
	Kyaukkyitaung	1886	910	2,000	900	1,100	490	
	Nyanle	1877	3,548	4,518	130	4,388	1,005	
	Lower Payagyi	1888	100	420	2	418	103	
	Bawbin	1869	1,483	1,500	4	1,496	805	
	Gwedauksan	1876	285	285	.....	285	96	
	Kangyi	1877	4,796	4,914	424	4,490	918	
	Myodwin	1869	40	40	1	39	44	
	Myaung	1876	1,760	1,860	310	1,550	290	
	Minhla	1876	915	2,800	3	2,800	230	
	Mókka	1876		540		537		
	Mókka	1873	1,230	10,591	1,946	8,645	540	
	Kadin-Bilin	1873	1,862	7,326	63	7,263	512	
	Kón-Bilin	1876	190	1,325	1	1,324	314	
	Thônzè	1876	1,285	2,135	12	2,123	145	
RANGOON	Magayi plantation	1872	1,674	1,695	.....	1,695	1,967	
	Magayi reserve	1872	2,070	2,049	5	2,044		
	Kyetpyugan plantation	1868	683	683	.....	683	805	
	Kyetpyugan teak yas	1884	115	115	.....	115		
	Kyetpyugan reserve	1886	142	142	.....	142		
	Dawe plantation	1883	537	613	22	791	.....	
	Dawè reserve	1883	19,048	30,425	7,040	23,385		
TOUNGOO	Pyunchaung reserve	1877	2,940	3,440	1,546	1,894	254	
	Saing-Yanè reserve	1877	12,580	19,200	.....	19,200	975	
	East Swa reserve	1883	17,080	17,280	3,520	13,760	564	
	Bôndaung reserve	1884	.....	10,240	1,190	9,050	500	
	Kabaung reserve	1884	.....	2,560	.....	2,560	286	
	Sundries for all reserves	.....	.....	.....	.....	.....	86	
	Total ...	.....	84,387	139,592	19,278	120,314	12,233	
	GRAND TOTAL LOWER BURMA ...	.....	137,966	218,708	25,076	193,632	17,214	

ANNUAL FORM NO. 52 [PRESCRIBED].—*Statement showing the Area of Plantations in the Tenasserim Circle for 1888-89.*

Division.	Name of plantation.	Area in acres.				Receipts	Charges	Remarks.
		On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Of the year.		
						Rs.	Rs.	
	Regular Plantations.							
ATTABAN ...	Thinganyinaung	16	...	...	16	...	...	
WEST SALWEEN	Shwegyin	5	...	...	5	...	...	
	Kolón island	2	...	...	2	...	...	
	Total ...	7	...	...	7	...	...	
	Total Regular Plantations ...	23	...	...	23	...	...	
	Cultural Operations.							
	Mergui experimental plantations	108	3	...	111	272	1,321	
	Total Cultural Operations ...	108	3	...	111	272	1,321	
	Total Regular Plantations ...	23	...	...	23	...	...	
	Total Cultural Operations ...	108	3	...	111	272	1,321	
	Total Taungya Plantations ...	3,824	854	...	4,678	...	8,756	
	Total Tenasserim Circle ...	3,955	857	...	4,812	272	10,077	

ANNUAL FORM NO. 52 [PRESCRIBED].—*Statement showing the Area of Plantations in the Pegu Circle for 1888-89.*

Division.	Name of plantation.	Area in acres. On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Receipts Of the year.	Charges Of the year.	Remarks.
	Regular Plantations.							
PROME	Prome plantation	73	.....	.....	73	.....	.....	
THARRAWADDY	Bawbin Chaungwa	340	.....	.....	340	.....	.....	
	Kywèmakaing	144	.....	.....	144	.....	60	
	Myodwin	10	.....	.....	10	.....	.....	
	Total ...	494	.....	.....	494	.....	60	
RANGOON	Kyetpyugan	798	.....	.....	798	.....	565	2 acres failure.
	Magayi	1,674	21	.....	1,695	.....	1 622	
	Total ...	2,472	21	.....	2,493	.....	2,187	
TOUNGOO	Kanni	65	.....	.....	65	.....	.....	
	Pyunchaung	701	.....	.....	701	.....	72	
	Yenè	9	.....	.....	9	.....	.....	
	Total ...	775	.....	.....	775	.....	72	
ARAKAN ...	Myauktaing	10	.....	.....	10	.....	.....	
	Total Regular Plantations ...	3,824	21	.....	3,845	.....	2,319	
	Cultural Operations.							
THARRAWADDY	Bwet	600	.....	.....	600	.....	74	
	Nyanlè	630	.....	.....	630	.....	.....	
	Kangyi	350	.....	.....	350	.....	.....	
	Môkka-Bilin	1,008	.....	.....	1,008	.....	.....	
	Kyaukkyitaung	.....	.....	.....	.....	.....	.....	
	Gwedaukkwin	.....	.....	.....	.....	.....	.....	
	Pazingyi	125	.....	.....	125	.....	224	
	Kadinzauk	300	.....	.....	300	.....	298	
	Kèn-Bilin	.....	.....	.....	.....	.....	590	
	Kadetchaung	.....	.....	.....	.....	.....	336	21 acres failure.
	Thônzè	.....	.....	.....	.....	.....	115	
	Total ...	3,213	.....	.....	3,213	.....	1,677	
	Total Cultural Operations ...	3,213	.....	.....	3,213	.....	1,677	
	Total Regular Plantations ...	3,824	21	.....	3,845	.....	2,319	
	Total Cultural Operations ...	3,213	.....	.....	3,213	.....	1,677	
	Total Taungya Operations ...	9,631	1,810	.....	11,441	.....	32,387	
	Total Pegu Circle VIII(*d*) ...	16,668	1,831	.....	18,499	.....	36,383	
	ABSTRACT.							
	Lower Burma.							
	Total Regular Plantations	3,847	21	.....	3,868	.....	2,319	
	Total Taungya Plantations	13,455	2,664	.....	16,119	.....	41,143	
	Total Cultural Operations	3,321	3	.....	3,324	272	2,998	
	GRAND TOTAL ...	20,623	2,688	.....	23,311	272	46,460	

ANNUAL FORM NO. 52A.—*Statement of Taungya, Teak, Thitka, and Padauk Plantations in the Tenasserim Circle for 1888-89.*

Division.	Name of reserve.	Year of formation.	Area on 1st April 1888.	Area planted with tank, &c., during 1888-89.	Cost up to 1887-88.		Cost during 1888-89.		Total cost.	Average cost per acre up to 1888-89.	Area on 31st March 1889.	Remarks.
					Original cost.	Maintenance.	Original cost.	Maintenance.				
			Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	R. A. P.	Acres.	
WEST SALWEEN	Sinzwè	1869-70	1,238	127	3,017	4,899	1,020	862	9,798	7 2 10	1,365	
	Wamu	1877-78	55	...	270	136	..	...	406	7 6 1	55	
	Kahilu	1879-80	137	37	442	714	294	341	1,791	10 4 8	174	
	Ônkangyi	1877-78	780	105	2,219	866	637	346	4,068	4 14 4	535	
	Bi'akatkyi	1877-78	392	111	517	464	502	207	1,690	3 13 0	443	
	Minnannwè	1877-78	113	...	436	115	...	...	551	4 14 0	113	
	Mewaing	1878-79	384	218	1,709	363	1,598	273	3,948	6 8 11	602	
	Total	.....	2,999	598	8,610	7,582	4,051	2,039	22,272	6 3 4	3,587	
ATTARAN	Dali ...	1877-78	154	43	643	304	211	18	1,176	5 15 6	197	
	Kyunchaung	1881-82	178	25	1,344	485	351	68	2,348	11 1 2	203	
	Pakabo	1883-84	3	...	11	7	...	...	18	6 0 0	3	
	Natchaung	1888-89	...	33	..	...	135	...	135	4 1 5	33	
	Gôngyi	1888-89	...	17	...	...	116	...	116	6 13 2	17	
	Thinganyinaung	1888-89	...	4	...	...	100	..	100	25 0 0	4	
	Total	.....	335	122	1,998	796	913	86	3,793	8 4 10	457	
EAST SALWEEN ...	West Mepale ...	1882-83	492	134	2,776	996	741	936	5,449	8 11 3	626	
	Plantations other than Teak.											
WEST SALWEEN ...	Kahilu ...	1883-84	6	...	35	14	...	...	49	8 2 8	6	
ATTARAN ...	Dali ...	1886-87	2	...	14	...	...	...	14	7 0 0	2	
	Total	.....	8	...	49	14	...	...	63	7 14 0	8	
	GRAND TOTAL TENASSERIM CIRCLE	.....	3,824	854	13,433	9,388	5,705	3,061	31,577	6 12 0	4,678	

ANNUAL FORM NO. 52A.—*Statement of Taungya, Teak, Cutch, &c., Plantations in the Pegu Circle for 1888-89.*

Division.	Name of plantation.	Area in acres.				Cost up to 1887-88.		Cost during 1888-89.		Total.	Average per acre.
		On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Original cost.	Maintenance.	Original cost.	Maintenance.		
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
PROME	Chaungzauk	504	63	...	567	3,096	3,679	794	293	7,862	13 13 10
	Bwet	300	175	...	475	1,613	665	1,797	150	4,225	8 14 4
	Shwele Yoma	...	...	...	...	76	...	...	...	76	.....
	Nyanlè	497	193	...	690	5,673	1,822	2,155	868	10,518	15 3 11
	Taungnyo Yoma	...	...	...	...	135	59	...	...	194	... ..
	Thitcho	15	...	...	15	70	...	...	...	70	4 10 5
	Gwèdauksan	81	...	...	81	890	490	...	16	1,405	17 5 6
	Bawbin Kyaukpyu	...	...	...	...	118	10	...	...	128	.....
	Bawbin Chaungwa	361	57	...	418	3,753	1,378	677	623	6,431	15 6 2
	Lower Payagyi	67	56	...	123	817	46	628	145	1,636	13 4 10
THARRAWADDY.	Kangyi	312	7	...	319	2,931	1,551	62	553	5,097	15 15 8
	Myodwin	2	1	...	3	31	9	5	6	51	17 0 0
	Myaung	297	...	...	297	3,868	1,479	...	494	5,841	19 10 8
	Minhla	932	435	...	1,367	10,995	3,636	5,144	970	20,745	15 2 10
	Môkka	2,601	108	...	2,709	25,422	11,898	1,443	2,927	41,690	15 6 3
	Kadin-Bilin	773	51	...	824	9,017	3,311	629	1,289	14,246	17 4 7
	Kôn-Bilin	368	...	...	368	3,203	1,774	...	655	5,632	15 4 10
	Thônzè	366	92	...	458	3,427	1,362	1,075	905	6,769	14 12 6
	Gwedaukkwin	...	23	...	23	...	...	186	...	186	8 1 5
	Kyaukkyidaung	...	10	...	10	...	...	84	...	84	8 6 5
	Total	6,972	1,208	...	8,180	72,048	29,490	13,985	9,601	1,25,024	15 4 7
RANGOON	Zamayi	472	276	...	748	4,163	382	2,369	294	7,228	9 10 7
	Teak seed	...	...	...	...	36	...	...	...	36	.....
	Total	472	276	...	748	4,199	382	2,369	294	7,264	9 11 6

ANNUAL FORM NO. 52A [PRESCRIBED].—*Statement of Taungya, Teak, Cutch, &c., Plantations in the Pegu Circle for 1888-89*—concluded.

Division.	Name of plantation.	Area in acres.				Cost up to 1887-88.		Cost during 1888-89.		Total.	Average per acre.
		On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Original cost.	Maintenance.	Original cost.	Maintenance.		
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Toungoo	Yanè	96	22	...	118	935	252	227	134	1,548	13 1 11
	East Swa	177	...	...	177	1,536	404	...	346	2,286	12 14 8
	Bôndaung	24	...	...	24	189	122	...	8	319	13 4 8
	Kabaung	105	70	...	176	1,143	185	426	46	1,800	10 3 8
	Pyunchaung	9	...	...	9	395	79	...	...	474	52 10 8
	Plantation boards, &c.	...	...	...	...	...	41	180	...	221	.....
	Total	412	92	...	504	4,198	1,083	833	534	6,648	13 3 1
Shwegyin	Kyundaung	...	...	...	...	90	...	30	...	60	.....
	Total Teak Taungyas	8,960	1,630	...	9,999	83,571	34,634	17,931	10,722	1,46,858	14 11 0
Prome	Chaungzauk	38	...	...	38	350	288	...	...	638	16 12 8
	Satsuwa	...	2	...	2	...	...	31	...	31	15 8 0
	Total	38	2	...	40	350	288	31	...	669	16 11 7
Toungoo	Pyunchaung	2	...	...	2	10	...	...	...	10	5 0 0
	Total Cutch Taungyas	40	2	...	42	360	288	31	...	679	16 2 8
Prome	Chaungzauk	590	...	...	590	3,839	3,076	...	721	7,636	12 15 1
	Tindaw	...	27	...	27	...	...	331	...	331	12 4 2
	Total	590	27	...	617	3,839	3,076	331	721	7,967	12 14 7
Tharrawaddy.	Kyaukkyidaung	235	48	...	283	1,958	1,143	406	529	4,036	14 4 2
	Pazingyi	12	...	...	12	108	23	...	26	157	13 1 4
	Gwedaukkwin	394	77	...	471	3,222	1,800	626	805	6,453	13 11 3
	Bwet	...	11	...	11	...	...	106	...	106	9 13 1
	Kangyi	...	6	...	6	...	...	57	...	57	9 8 0
	Total	641	142	...	783	5,288	2,966	1,197	1,360	10,811	13 12 11
Toungoo	Saing-Yanè	...	...	...	...	...	...	73	21	94	.....
	Total Teak and Cutch	1,231	169	...	1,400	9,127	6,042	1,601	2,102	18,872	13 7 8
	Total Taungyas	9,631	1,810	...	11,441	93,058	40,964	19,563	12,824	1,66,409	14 8 9

ANNUAL FORM NO. 53 [PRESCRIBED].—*Statement showing number of Trees felled or girdled by Government Agency in the Tenasserim Circle during 1888-89.*

(SELECTION FELLINGS.)

Division.	Trees felled or girdled. Description	Number.	Remarks.
East Salween	Teak	995	Inside reserves
	Pyinma	200	Outside reserves.
Attaran	Pyinma	300	Ditto.
	Total	1,495	
	Abstract.		
	Teak	995	
	Total	995	

ANNUAL FORM NO. 53 [PRESCRIBED].—*Statement showing number of Trees felled or girdled by Government Agency in the Pegu Circle during 1888-89.*

(SELECTION FELLINGS.)

Division.	Trees felled or girdled. Description	Number.	Remarks
Prome	Teak trees girdled	2,356	
Tharrawaddy	Teak trees girdled	2,993	Inside reserves.
Rangoon	Teak trees girdled	1,500	Ditto.
Toungoo	Teak trees girdled	6,875	
Shwegyin	Teak trees girdled	600	
	Total	14,324	
	Abstract.		
	Teak inside reserves	4,493	
	Teak outside reserves	9,831	
	Total	14,324	

FORM NO. 54.—*Statement of Outturn of Timber and Firewood in the Tenasserim Circle during 1888-89.*

Division.	Description of materials.	Outturn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.	Right-holders.	
	I.—RESERVED FORESTS.									
ATTARAN	Teak logs, pieces, and crooks	...	...	...	...	6,120	...	...	...	Attaran.
EAST SALWEEN ...	Teak logs and pieces	...	...	...	...	103,920	...	...	...	Taungyin.
WEST SALWEEN	Teak pieces	...	...	...	...	31,691	...	...	...	Bilin.
	Teak logs and pieces	...	...	...	...	73,137	...	...	...	Dondami.
	Teak logs and pieces	...	...	...	...	5,700	...	...	...	Yunzalin.
SOUTH TENASSERIM ...	Pyinkado logs	...	...	...	...	478	...	...	...	
	Total ...	...	...	...	...	221,046	...	...	...	
	II.—PROTECTED FORESTS. *Nil.*									
	III.—UNRESERVED FORESTS.									
ATTARAN	Teak logs, pieces, and crooks	...	...	...	...	23,658	...	550	58,700	Attaran.
	Padauk logs	...	...	...	...	6,862	...	125	...	
	Thitka logs	...	...	...	...	8,171	...	50	...	
	Pyinma logs	...	...	...	...	1,380	...	2,300	...	
	Other reserved woods	...	...	...	...	...	33,266	640	9,053	
	Unreserved woods	...	...	...	...	...	238,583	11,650	40	
	Charcoal*	...	...	...	...	...	...	...	...	
EAST SALWEEN	Teak logs and pieces	...	...	...	...	208,528	...	...	...	Taungyin.
	Teak logs, pieces, and crooks	...	...	...	...	20,547	...	...	...	Taungbwè.
	Teak logs and pieces	...	...	...	...	1,572	...	...	...	Nanpatòk.
	Padauk logs	...	...	...	...	649	...	...	...	
	Pyinma logs	...	...	...	...	23,695	...	1,325	...	
	Other reserved woods	...	...	...	...	...	10,184	25	...	
	Unreserved woods	...	...	...	...	998	201,500	500	...	
WEST SALWEEN	Teak logs and pieces	...	...	...	...	39,049	...	...	...	Upper Salween.
	Teak logs, pieces, and crooks	...	...	...	...	21,286	...	...	...	Lower Salween.
	Teak logs	...	...	...	...	7,009	...	...	...	Bilin.
	Teak pieces and crooks	...	...	...	...	9,896	...	...	...	Dòndami.
	Teak logs and pieces	...	...	...	...	14,490	...	...	...	Pandaw.
	Teak logs, pieces and crooks	...	...	...	...	8,580	...	...	...	Mizan.
	Teak logs	...	...	...	...	50	...	...	...	Papun.
	Pyinma logs	...	...	...	...	12,095	...	1,575	...	
	Other reserved woods	...	...	...	...	...	6,880	125	...	
	Unreserved woods	...	...	...	...	...	88,640	2,000	...	
KADO	Teak logs and pieces	...	...	...	...	4,432	...	600	...	Kolòn.
	Thingan	...	...	...	...	...	1,599	...	...	
	Pyinma	...	...	...	...	...	136	500	...	
	Thitkado	...	...	...	...	...	...	520	...	
	Unreserved woods	...	...	...	...	...	90,810	1,775	...	
	Charcoal*	...	...	...	...	...	...	...	...	
SOUTH TENASSERIM	Thingan	...	...	...	...	...	74,350	800	...	
	Kaungmhu	...	...	...	...	...	3,650	...	...	
	Anan	...	...	...	...	...	3,500	4,040	...	
	Karawè	...	...	...	...	...	1,700	200	...	
	Thitka	...	...	...	...	...	3,850	100	...	
	Thitkado	...	...	...	...	...	400	...	...	
	Kanzaw	...	...	...	...	183	8,650	...	...	
	Unreserved woods	...	...	...	...	318	317,605	650	...	
	Total ...	...	...	...	...	414,028	1,085,303	30,050	67,793	
	GRAND TOTAL ...	...	...	...	...	635,074	1,085,303	30,050	67,793	

* The total quantity of firewood used cannot be given, as licenses are issued for the number of men engaged and not for the quantity of wood consumed.

FORM NO. 54.—*Statement of Outturn of Timber and Firewood in the Pegu Circle during 1888-89.*

Division.	Description of materials.	Outturn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.	Right-holders.	
	I.—RESERVED FORESTS.									
PROME	Cutch trees	...	...	...	...	...	84,650	...	...	
	Unreserved woods	...	...	...	...	...	14,400	...	...	
THARRAWADDY	Teak	...	...	...	..	251,826	...	...	...	
	Cutch	...	...	...	...	...	85,028	...	...	
	Reserved woods	...	...	...	...	...	1,290	...	...	
	Unreserved woods	...	...	...	...	...	6,361	...	...	
	Firewood	...	...	...	...	...	...	...	...	14 trees.
RANGOON	Teak logs	...	...	...	...	21,398	...	...	...	
	Refuse teak logs	...	...	...	...	253,411	...	...	...	
	Reserved woods	...	...	...	...	..	19,000	...	...	
	Unreserved woods	...	...	...	...	600	351,997	...	...	
TOUNGOO	Unreserved woods	...	...	...	...	...	...	...	9,950	
	Total	...	...	...	...	527,235	512,666	...	9,950	
	II.—PROTECTED FORESTS.									
	Nil									
	III.—UNRESERVED FORESTS.									
PROME	Teak logs	...	...	...	...	61,950	32,900	1,650	...	
	Cutch trees	...	...	...	...	...	2,450	...	...	
	Unreserved woods	...	...	...	...	...	647,950	...	...	
	Posts and poles	...	...	...	...	...	168,500	...	...	
	Charcoal	...	...	...	...	...	...	...	...	2,576 trees.

THARRAWADDY	Teak logs ...	...	...	...	...	...	...	...	...	409,950	...	800	...	
	Paddy-field teak	...	...	...	...	...	...	...	...	527,146	19,000	...	...	
	Reserved woods	...	...	...	...	...	...	...	...	...	2,920	...	...	
	Unreserved woods	...	...	...	...	...	...	...	...	...	234,311	...	...	
	Posts and poles	...	...	...	...	...	...	...	...	...	2,450	...	...	
	Refuse teak ...	...	...	...	...	...	...	...	...	...	2,300	...	...	
	Waif teak ...	...	...	...	...	...	...	...	...	7,528	...	...	...	
RANGOON	Teak logs ...	...	...	...	...	...	...	...	...	48,000	...	300	...	
	Reserved logs ...	...	...	...	...	...	...	...	...	13,000	5,500	750	...	
	Unreserved logs	...	...	...	...	...	...	...	...	...	433,753	...	...	
	Post and poles ...	...	...	...	...	...	...	...	...	...	64,150	...	...	
	Charcoal ...	...	...	...	...	...	...	...	...	...	...	...	...	304 trees
TOUNGOO	Teak	...	...	...	...	...	...	...	...	477,800	11,100	300	...	
	Reserved woods	...	...	...	...	...	...	...	...	...	24,850	1,100	...	
	Unreserved woods	...	...	...	...	...	...	...	...	...	407,200	...	...	
	Posts and poles	...	...	...	...	...	...	...	...	...	44,300	...	...	
	Charcoal ...	...	...	...	...	...	...	...	...	...	...	...	...	7,671 trees.
SHWEGYIN	Teak	...	...	...	...	...	...	...	...	20,600	2,000	...	...	
	Reserved woods	...	...	...	...	...	...	...	...	24,650	97,000	1,000	...	
	Unreserved woods	...	...	...	...	...	...	...	...	...	321,900	...	...	
	Posts and poles	...	...	...	...	...	...	...	...	...	67,300	...	...	
	Charcoal ...	...	...	...	...	...	...	...	...	...	...	...	...	1,752 trees.
WESTERN	Teak	...	...	...	...	...	...	...	...	2,000	4,750	2,000	...	
	Reserved woods	...	...	...	...	...	...	...	...	...	12,200	4,000	...	
	Unreserved woods	...	...	...	...	...	...	...	...	...	954,500	...	...	
	Posts and poles...	...	...	...	...	...	...	...	...	...	492,900	...	...	
	Charcoal ...	...	...	...	...	...	...	...	...	...	...	...	...	247 trees.
AGENCY	Posts and poles	...	...	...	...	...	...	...	...	...	8,500	...	...	
	Firewood ...	...	...	...	...	...	...	...	...	...	...	...	...	17,185,463 billets.
				Total	...	...	...	...	...	1,592,624	4,264,684	11,900	...	
				TOTAL PEGU CIRCLE	...	...	...	...	...	2,119,859	4,777,350	11,900	9,950	

FORM NO. 55.—*Statement showing Outturn of Minor Forest Produce in the Tenasserim Circle for 1888-89.*

Division.	Description of produce	Produce removed or utilized: By Government agency. Quantity.	By Government agency. Value	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs		Rs.		Rs	
				I.—Reserved Forests.								
				Nil								
				II.—Protected Forests								
				Nil.								
				III.—Unreserved Forests								
Attaran	Kanyin oil	...	...	...	216	...	...	...	...	...	216	
East Salween	Kanyin-oil	...	...	...	30	...	...	...	...	...	30	
Kado	Kanyin-oil	...	...	...	30	...	...	...	...	...	30	
South Tenasserim	Kanyin-oil	...	...	...	1,815	...	...	...	...	...	1,815	
	Total	...	...	...	2,091	...	...	...	...	...	2,091	

FORM NO 55.—*Statement showing Outturn of Minor Forest Produce in the Pegu Circle for 1888-89.*

Division.	Description of produce	PRODUCE REMOVED OR UTILIZED										Remarks
		By Government agency		*By purchasers*		*By free grants*		*By right-holders*		*Total.*		
		Quantity	Value	Quantity.	Value	Quantity	Value	Quantity	Value	Quantity	Value.	
			Rs		Rs		Rs		Rs		Rs	
				I.—RESERVED FORESTS								
PROME	Shaw bark	...	...	4,900	49	...	...	...	...	4,900	49	
	Thetkè	...	...	200	1	...	...	...	...	200	1	
	Cutch	...	...	421,000	6,420	...	...	...	...	421,000	6,420	
THARRAWADDY	Bamboos	...	No.	823,200	2,058	...	...	32,425	81	855,625	2,139	
	Grazing	...	Head	250	126	...	...	1,598	451	1,848	577	
	Cutch	...	Viss	379,000	24,353	...	...	...	...	379,000	24,353	
	Shaw fibre	...	,,	3,190	32	...	...	850	8	4,040	40	
	Cigar leaves	...	,,	15,750	157	...	...	...	...	15,750	157	
	Honey	...	,,	260	47	...	...	...	...	260	47	
	Thatch	...	Bundles	700	7	...	...	7,750	77	8,450	84	
	Canes	...	No.	...	...	...	...	200	2	200	2	
RANGOON	Bamboos	...	No.	1,083 350	2,708	...	...	...	...	1,083,350	2,708	
	Grazing	...	Head	308	97	...	...	...	...	308	97	
	Shaw	...	Viss	12,650	253	...	...	...	...	12,650	253	
	Thang	...	Cart-loads	2	8	...	...	...	...	2	8	
	Hattan	...	,,	8	32	...	...	...	...	8	32	
	Thatch	...	,,	6	12	...	...	...	...	6	12	
	Salu	...	,,	1	2	...	...	...	...	1	2	
	Tazin flower	...	,,	...	1	...	...	...	...	...	1	
	Laterite	...	Feet	37,000	37	...	...	...	...	37,000	37	
	Fishing	...	...	...	10	...	...	...	...	...	10	
TOUNGOO	Bamboos	...	No.	69,700	174	...	...	6,475	17	76,175	191	
	Shaw fibre	...	Viss	950	9	...	...	...	...	950	9	
	Canes	...	No	370	37	...	...	...	...	370	37	
	Kanyin-oil	...	Viss	2,000	20	...	...	...	...	2,000	20	
	Limestone	...	C feet	2,000	20	...	...	...	...	2,000	20	
	Honey	...	Viss	200	35	...	...	...	...	200	35	
	Thetkè	...	Bundles	...	...	...	...	525	1	525	1	
	Grazing	...	Head	...	...	...	...	118	30	118	30	
SHWEGYIN	Bamboos	...	No.	13,300	33	...	...	...	...	13,300	33	
		Total			39,798	...	...	...	667	...	39,465	

FORM NO. 55.—*Statement showing Outturn of Minor Forest Produce in the Pegu Circle for 1888-89*—concluded.

Division.	Description of produce.		Produce removed or utilized.										Remarks.
			By Government agency.		*By purchasers.*		*By free grants.*		*By right-holders.*		*Total.*		
			Quantity	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value	Quantity.	Value.	
				Rs.		Rs.		Rs.		Rs		Rs.	
					II.—PROTECTED FORESTS.								
					Nil								
					III.—UNRESERVED FORESTS.								
PROME	Cutch	Viss	...	...	2,802,000	93,950	...	...	...	...	2,802,000	93,950	
	Resin and wood-oil ...	,,	...	...	31,800	212	...	...	...	...	31,800	212	
THARRA-WADDY	Cutch	Viss	...	...	261,000	16,060	...	...	..	...	261,000	16,060	
	Wood-oil	,,	...	...	6,000	100	..	...	...	...	6,000	100	
RANGOON	Kanyin-oil	Viss	...	...	128	64	..	...	...	...	128	64	
TOUNGOO	Cutch	Viss	...	...	45,000	1,820	...	...	...	...	45,000	1,820	
	Thitsi	,,	...	...	24,500	350	...	...	...	...	24,500	350	
	Kanyin-oil	,,	...	...	23,400	234	...	...	...	...	23,400	234	
	Pwenyet	,,	...	...	150	2	...	...	...	...	150	2	
SHWEGYIN	Wood-oil	Viss	...	...	1,160	232	...	...	...	...	1,160	232	
WESTERN	Cutch	Viss	...	...	72,000	2,400	...	...	...	...	72,000	2,400	
	Wood-oil	,,	...	...	40	12	...	...	...	..	40	12	
	Total	...	...	...	...	1,15,436	...	...	...	..	...	1,15,436	
	GRAND TOTAL PEGU CIRCLE	...	...	...	...	1,54,174	...	...	...	667	...	1,54,841	

ANNUAL FORM NO. 56 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally in the Tenasserim and Pegu Circles during 1888-89.*

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
TENASSERIM CIRCLE.				
TIMBER.				
Opening balance.				
Attaran Division. Teak logs	1	77		
Padauk logs	124	5,111		
Ingyin logs	27	608		
Pyinma logs	27	1,128		
Thitya logs	7	208		
Thingan logs	106	4,803		
Padauk planks	1	52		
Teak scantlings	2	117		
Pyinma scantlings	2	141		
Thitya sleepers	8	27		
			305	12,390
East Salween Division. Teak logs and pieces	2,621	98,606		
Padauk logs	88	2,281		
Ingyin logs	13	635		
Thitka logs	9	345		
Thitkado logs	5	255		
Pyinkado posts	7	81		
Thingan boat-hulls	3	266		
			2,746	102,469
West Salween Division. Ingyin logs	14	520		
Thitka logs	1	46		
Pyinkado sleepers, large.	140	485		
Pyinkado sleepers, small.	238	275		
			393	1,335
South Tennasserim Division. Thitka logs	7	450		
Anan logs	6	177		
Pyinma logs	38	1,900		
Thingan logs	21	903		
Padauk logs	38	3,451		
Tagu logs	1	20		
Kazit logs	1	21		
Teak logs	1	65		
Yamane logs	2	115		
Tharapè logs	1	128		
Sleepers, small	14,776	19,707		
Sleepers, large	401	1,497		
			15,293	28,434
Kado Division. Drift teak	6,009	182,773		
Foreign teak	40,490	1,619,600		
Foreign woods, other kinds.	60	2,305		
			46,559	1,804,678
Received from the Forests in Depôts.				
Teak logs, pieces, and crooks	19,947	580,195		
Padauk logs	159	7,511		
Thitka logs	97	3,171		
Pyinma logs	710	34,278		
Kanzo logs	2	183		
Unreserved woods (logs)	38	1,794		
Drift teak logs	6,799	283,541		
Drift logs, other than teak	37	2,121		
Confiscated logs, other than teak.	21	1,451		
			27,810	919,245
Received from the Forests and sold locally.				
Teak logs	1	50		
Pyinma logs	60	2,892		
			61	2,942
Received by conversion in Depôts.				
Teak scantlings	21	1,080		
Padauk log-ends	1	...		
			22	1,080
Foreign timber entered at Kado Revenue Station.				
Teak logs	135.755	6,787,750		
Woods, other kinds	8	300		
			135,763	6,788,050
Carried over	...	...	228,952	9,660,623

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number of quantity.	Total of each head. Cubic feet.
TENASSERIM CIRCLE.				
TIMBER.				
Removed by purchasers from Depôts.				
Teak logs, pieces and crooks	20,866	620,348		
Padauk logs	189	9,476		
Ingyin logs	46	1,630		
Thingan logs	24	1,183		
Thitka logs	98	3,208		
Pyinma logs	305	15,773		
Kanazo logs	2	183		
Unreserved woods	35	1,599		
Teak scantlings, tons	1	68		
Padauk log-ends	1	...		
Drift teak logs	3,791	117,261		
Drift woods, other kinds	104	3,393		
Confiscated woods, other kinds.	12	898		
Sleepers, small	14,738	19,650		
Sleepers, large	190	704		
			40,402	800,424
Sold locally.				
Teak logs	1	50		
Pyinma logs	60	2,892		
			61	2,942
Converted in Depôts.				
Teak logs (Thaungyin)	30	1,364		
Teak pieces (drift)	20	313		
			50	1,677
Used by the Department.				
Drift teak logs	49	482		
Teak scantlings	17	885		
			66	1,367
Delivered to claimants.				
Drift teak	2,919	126,295		
Drift woods, other kinds	4	386		
			2,923	126,681
Logs cleared from Depôts on payment of duty.				
Foreign teak	119,646	5,962,300		
Foreign woods, other kinds	6	300		
			119,652	5,962,600
Closing balance.				
Attaran Division. Padauk logs	95	3,520		
Ingyin logs	6	202		
Pyinma logs	41	1,780		
Thitya logs	7	268		
Thingan logs	82	3,620		
Padauk planks	1	52		
Teak scantlings	5	244		
Pyinma scantlings	2	141		
Thitya sleepers	8	27		
			249	9,854
East Salween Division. Teak logs and pieces	1,344	54,568		
Padauk logs	68	1,958		
Pyinma logs	258	12,077		
Thitka logs	8	308		
Thitkado logs	5	255		
Pyinkado posts	7	81		
Thingan hulls	3	266		
			1,713	69,513
West Salween Division. Teak logs and pieces	390	2,598		
Thitka logs	1	46		
Pyinma logs	133	5,774		
Pyinkado sleepers, large	140	485		
Pyinkado sleepers, small	238	275		
			882	9,178
Kado Division. Drift teak	5,958	220,963		
Foreign teak	56,590	2,425,050		
Foreign woods, other kinds.	62	2,305		
			62,619	2,647,618
Carried over	...	...	228,576	9,651,804

ANNUAL FORM NO. 56 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency, &c.*—continued.

Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.	Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
TENASSERIM CIRCLE —concluded.					TENASSERIM CIRCLE —concluded.				
Brought forward ...			228,052	9,660,623	Brought forward ...	...	...	228,576	9,651,864
Closing balance—concluded					*Closing balance*—concluded.				
					South Tenasserim Division. Thitka logs ...	7	450		
					Anan logs ...	6	177		
					Kamaung logs ...	38	1,900		
					Thungan logs ...	21	903		
					Padauk logs ...	37	3,400		
					Thitshè logs ...	3	195		
					Drift: Teak logs ...	1	65		
					Kazit logs ...	1	21		
					Yamanè ...	2	115		
					Tharapè ...	1	128		
					Kadut ...	1	63		
					Confiscated kadut...	9	552		
					Sleepers, large ...	211	733		
					Sleepers, small ...	38	57		
								376	8,759
GRAND TOTAL ...	...	...	228,052	9,660,623	GRAND TOTAL ...	...	...	228,952	9,660,623
PEGU CIRCLE.					PEGU CIRCLE.				
OPENING BALANCE.					*Removed by purchasers from Depôts.*				
Prome—									
Teak logs	3	126			Teak logs	27,476	1,291,044		
Drift teak logs ...	146	5,678			Logs, other than teak ...	200	12,458		
					Slabs, other than teak ...	2,400	...		
			149	5,804	Sleepers, other than teak	1,622	2,545		
					Drift teak logs ..	205	9,840		
Tharrawaddy—					Drift logs, other than teak	11	462		
Teak paddy-field logs ...	14,041	300,271						32,015	1,317,249
Confiscated teak logs ...	5	230							
Confiscated logs, other than teak.	12	492			*Sold locally.*				
			14,058	300,993					
Shwegyin—									
Kanyin logs	2	82			Teak logs	1,072	51,156		
Drift teak logs ...	27	1,107			Teak logs, refuse ...	189	8,604		
Drift logs, other than teak	3	117			Teak paddy-field logs ...	29,737	582,053		
					Logs, other than teak ...	553	23,126		
					Confiscated logs, other than teak.	125	5,125		
			32	1,306	Drift teak logs	450	22,032		
					Drift teak waif ...	26	1,196		
Western—					Drift logs, other than teak	43	1,806		
Pyinkado logs ...	259	10,619			Drift logs, other than waif	8	33		
Kanyin logs ...	111	4,551						32,212	695,594
Kashit logs ...	2	82							
Thabyè logs ...	17	697							
Pyinkado sleepers ...	1,622	2,545							
Pyinkado slabs ...	2,400	...			*Used, lost, drifted, &c.*				
Teak drift logs ...	27	1,053							
			4,438	19,547	Teak logs	2	96		
Agency—					Teak paddy-field logs ...	198	3,762		
Teak logs	19,243	855,828			Teak confiscated logs ...	5	280		
Teak sleepers ...	44	66			Teak drift logs ...	10	400		
Teak drift logs ...	111	4,329						215	4,548
			19,398	861,223	*Returned to claimants.*				
Received from Forests by extraction.									
Teak logs	24,844	1,204,512			Teak logs	13,779	659,392		
Teak waif logs ...	146	6,766			Logs, other than teak ...	14	588		
Teak paddy-field logs ...	27,784	502,368						13,793	659,
Teak refuse logs ...	4,073	216,958							
Logs, other than teak ...	220	9,768			*Transferred to Depôts.*				
			57,626	1,940,372					
Received from Forests and disposed of locally.					Teak logs	23,704	1,116,792		
					Teak waif	146	6,716		
					Teak refuse	4,464	206,879		
Confiscated logs, other than teak.	118	4,794			Drift teak logs	851	40,948		
Logs, other than teak ...	322	13,524			Drift teak waif ...	50	2,304		
					Logs, other than teak ...	5	210		
			435	18,318				20,240	1,375,839
Carried forward ...	...	...	96,136	3,147,563	Carried forward ...	...	...	107,475	4,053,140

ANNUAL FORM No. 56 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency, &c.*—concluded.

Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.	Particulars.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
PEGU CIRCLE—concluded.					PEGU CIRCLE.—concluded.				
Brought forward ...	...	...	90,136	3,147,563	Brought forward ...	...	...	107,475	4,053,140
Drift collected in various divisions during the year.					*Closing balance—*				
Teak logs	13,218	637,464			Prome—				
Teak waif logs	76	3,496			Teak logs	69	3,312		
Logs, other than teak ...	83	3,536			Drift teak logs ...	136	6,528		
			13,377	644,496				205	9,840
Received into Depôts from Forests.					Tharrawaddy—				
					Teak paddy-field logs ...	11,840	216,024	11,840	216,024
Teak logs	27,208	1,328,864							
Logs, other than teak ...	4	168			Shwegyin—				
Drift teak logs ...	1,006	46,476			Teak drift logs ...	117	4,234		
Drift logs, other than teak waif.	8	336			Drift logs, other than teak.	25	1,190		
			28,266	1,375,844				142	5,424
Collected by Agency.					Western—				
					Logs, other than teak ...	90	2,530		
Teak logs	1,484	68,464			Teak drift logs ...	404	23,340		
Logs, other than teak ...	12	509						494	25,870
			1,496	68,973	Agency—				
					Teak logs	19,033	922,644		
					Teak sleepers ...	44	66		
					Logs, other than teak...	4	168		
					Teak drift logs ...	58	3,700		
								19,139	926,578
Total ...	...	...	139,295	5,236,876	Total ...	...	...	139,295	5,236,876

ANNUAL FORM NO. 56A.—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1888-89.*

Particulars.	Tenasserim circle.		Pegu circle.		Total of each head.	
	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Opening balance ...	65,296	1,949,306	38,075	1,188,873	103,371	3,138,179
Received from Forests in Depôts.						
Teak logs, pieces, crooks, &c.	19,947	580,195	27,268	1,328,864	47,215	1,909,059
Padauk logs	159	7,511				
Thitka logs	97	8,171				
Pyinma logs	710	34,278	4	168	1,010	52,105
Kanazo logs	2	183				
Unreserved logs	38	1,794				
Drift teak logs	6,799	289,541	1,006	46,476	7,805	330,017
Drift logs, other than teak	37	2,121	8	336	45	2,457
Confiscated logs, other than teak ...	21	1,451	...	...	21	1,451
Total ...	27,810	919,245	28,286	1,375,844	56,096	2,295,089
Received from Forests by Extraction.						
Teak logs	...	...	24,844	1,204,512	24,844	1,904,512
Teak waif logs	...	...	146	6,766	146	6,766
Teak paddy-field logs	...	...	27,734	502,368	27,734	502,368
Teak refuse logs	...	...	4,673	216,958	4,673	216,958
Logs, other than teak	...	...	229	9,768	229	9,768
Total ...	...	...	57,626	1,940,372	57,626	1,940,372
Received from Forests and disposed of locally						
Teak logs	1	50	...	...	1	50
Logsother than teak	60	2,892	322	13,524	382	16,416
Confiscated logs, other than teak ...	...	...	113	4,794	113	4,794
Total ...	61	2,942	435	18,318	496	21,260

Particulars.	Tenasserim circle.		Pegu circle.		Total of each head.	
	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Removed from Depôts by Purchasers.						
Teak logs, pieces, crooks, &c. ...	20,866	620,348	27,478	1,291,944	48,344	1,912,292
Padauk logs	189	9,476				
Ingyin logs	46	1,630				
Thingan logs	24	1,183				
Thitka logs	98	8,208	299	12,458	998	50,510
Pyinma logs	305	15,773				
Kanazo logs	2	183				
Unreserved woods	35	1,599				
Teak scantlings, tons	1	68	...	...	1	68
Padauk log-ends	1	...	...	...	1	...
Slabs, other than teak	...	...	2,400	...	2,400	...
Sleepers, other than teak	14,928	20,414	1,622	3,545	16,550	22,959
Drift teak logs	3,791	117,261	205	9,840	3,996	127,101
Drift, other than teak	104	3,393	11	462	115	3,855
Confiscated, other than teak ...	12	898	...	...	12	898
Total ...	40,402	800,434	32,015	1,317,249	72,417	2,117,683
Disposed of Locally.						
Teak logs	1	50	1,072	51,156	1,073	51,206
Logs, other than teak	60	2,892	553	23,126	613	26,018
Teak refuse logs	...	...	189	8,694	189	8,694
Teak paddy-field logs	...	...	29,737	582,053	29,737	582,053
Confiscated logs, other than teak ...	...	...	125	5,125	125	5,125
Drift teak logs	...	...	459	22,032	459	22,032
Drift teak waif	...	...	26	1,196	26	1,196
Drift logs, other than teak	...	...	43	1,806	43	1,806
Drift logs, other than waif	...	...	8	336	8	336
Total ...	61	2,942	32,212	695,524	32,273	698,466
Used, Drifted, Lost, &c.						
Teak logs	...	...	2	96	2	96
Teak paddy-field logs	...	...	198	3,762	198	3,762
Teak confiscated logs	...	...	5	230	5	230
Teak drift logs	49	482	10	460	59	942
Teak scantlings	17	885	...	...	17	885
Total ...	66	1,367	215	4,548	281	5,915

RECEIVED BY CONVERSION IN DEPÔTS.						
Teak scantlings	21	1,080	...	...	21	1,080
Padauk log-ends	1	...	...	...	1	...
Total ...	22	1,080	...	...	22	1,080
FOREIGN TIMBER ENTERED IN KADO REVENUE STATION.						
Teak logs	135,755	6,787,750	...	...	135,755	6,787,750
Woods, other than teak	8	300	...	...	8	300
Total ...	135,763	6,788,050	...	...	135,763	6,788,050
DRIFT COLLECTED IN VARIOUS DIVISIONS.						
Teak logs	...	...	13,218	637,464	13,218	637,464
Teak waif logs	...	...	76	3,496	76	3,496
Logs, other than teak	...	...	83	3,536	83	3,536
Total ...	...	...	13,377	644,496	13,377	644,496
COLLECTED BY AGENCY.						
Teak logs	...	...	1,484	68,464	1,484	68,464
Logs, other than teak	...	...	12	509	12	509
Total ...	...	...	1,496	68,973	1,496	68,973
GRAND TOTAL ..	228,952	9,660,623	139,295	5,236,876	368,247	14,897,499

RETURNED TO CLAIMANTS.						
Drift teak logs	2,919	126,295	13,779	659,392	16,698	785,687
Drift logs other than teak	4	386	14	588	18	974
Total ...	2,923	126,681	13,793	659,980	16,716	786,661
TRANSFERRED TO DEPÔTS.						
Teak logs	...	...	23,704	1,118,792	23,704	1,118,792
Teak waif	...	...	146	6,716	146	6,716
Teak refuse	...	...	4,484	206,879	4,484	206,879
Drift teak logs	...	...	851	40,938	851	40,938
Drift teak waif	...	...	50	2,304	50	2,304
Logs, other than teak	...	...	5	210	5	210
Total ...	...	...	29,240	1,375,839	29,240	1,375,839
CLEARED ON PAYMENT OF DUTY.						
Foreign timber	119,646	5,982,300	...	...	119,646	5,982,300
Foreign timber, other than teak ...	6	300	...	...	6	300
Total ...	119,652	5,982,600	...	...	119,652	5,982,600
CONVERTED IN DEPÔTS.						
Teak logs	39	1,364	...	...	39	1,364
Teak pieces (drift)	20	313	...	...	20	313
Total ...	59	1,677	...	...	59	1,677
BALANCE.						
Teak logs	1,664	57,166	19,102	925,956	20,766	983,122
Teak scantlings	5	244	...	...	5	244
Teak paddy-field logs ...	...	...	11,840	216,024	11,840	216,024
Teak, foreign	56,599	2,425,050	...	...	56,599	2,425,050
Foreign woods, other kinds ...	62	2,305	...	...	62	2,305
Other than teak logs ...	838	36,853	94	2,698	932	39,531
Teak sleepers	...	...	44	66	44	66
Padauk planks	1	52	...	...	1	52
Other than teak scantlings ...	2	141	...	...	2	141
Other than teak posts ...	7	61	...	...	7	61
Other than teak sleepers ...	635	1,577	...	...	635	1,577
Thingan hulls	3	206	...	...	3	206
Drift timber	5,958	220,263	...	...	5,958	220,263
Drift teak	1	65	715	37,802	716	37,867
Drift, other than teak	5	327	25	1,190	30	1,517
Confiscated kadut	9	552	...	...	9	552
Total ...	65,789	2,744,923	31,820	1,183,736	97,609	3,928,658
GRAND TOTAL ...	228,952	9,660,623	139,295	5,236,876	368,247	14,897,499

FORM NO. 57 [PRESCRIBED].—*Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1888-89.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
TENASSERIM CIRCLE			Rs.			Rs.	Rs.	Rs.	
Timber.									
Logs, teak	2,622	98,683	47,208	1,664	57,166	40,741	..	6,467	
Drift logs, teak	6,010	182,838	60,120	5,959	220,328	59,610	.....	510	
Logs (woods, other kinds)	546	23,579	10,498	862	38,059	13,319	2,821	.....	
Sleepers	15,563	21,991	19,259	635	1,577	996	. . .	18,263	
Scantlings	5	310	171	8	437	360	189	. ...	
Foreign teak	40,490	1,619,600	8,09,800	56,599	2,425,050	11,31,980	3 22,180	. . .	
Foreign woods (other kinds)	60	2,305	600	62	2,305	620	20		
Total	65,296	1,949,306	9,47,656	65,789	2,744,922	12,47,626	2,99 970		
PEGU CIRCLE.									
Timber.									
Teak logs	19,251	857,184	5,30 580	19,102	925,956	6,74,500	1,43,920	.....	
Teak paddy-field logs	14,041	300,271	46,000	11,940	216,024	41,400	... ..	4,600	
Teak sleepers	44	66	22	44	66	22	.....	. . .	
Logs, other than teak	403	16,523	3,579	94	2,698	750	.....	2,829	
Sleepers, other than teak	1,622	2,545	1,622	.....	.....	. ....	.....	1,622	
Slab ends, other than teak	2,400	..	60	.....	.....	.....	.....	60	
Teak drift logs	311	12,167	7,388	715	37,802	16,440	9,052	.....	
Drift logs, other than teak	3	117	24	25	1,190	200	176	.....	
Total	38,075	1,188,873	5,89,275	31,930	1,183,736	7,33,312	1,44,037	.....	

Net difference for the year Rs. 4,44,007.

FORM NO. 57A.—*Abstract showing the value of Live and Dead-stock for the year 1888-89.*

Description of live and dead-stock.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
Live-stock	8	...	8,500	7	...	7,600	...	900	
Buildings	25	...	22,906	25	...	19,967	...	2,939	
Dead-stock	...	...	15,761	...	...	12,373	...	3,388	
Total Tenasserim Circle ...	...	...	47,167	...	...	39,940	...	7,227	
Live-stock	35	...	46,000	33	...	43,800	...	2,200	
Buildings	41	...	54,630	43	...	54,580	...	50	
Dead-stock	...	...	29,000	...	...	29,300	300	...	
Total Pegu Circle ...	...	...	1,29,630	...	...	1,27,680	...	1,950	
GRAND TOTAL LOWER BURMA ...	...	...	1,76,797	...	...	1,67,620	...	9,177	

Net difference against the year, Rs. 9177.

FORM NO. 58 [PRESCRIBED].—*Summary of Revenue of the different Divisions during 1888-89.*

Budget heads.	Attaran division.	Kado division.	South Tenasserim division.	Total Tenasserim Circle.	Agency.	Rangoon division.	Tharrawaddy division.	Prome division.	Western division.	Toungoo division.	Shwegyin division.	Total Pegu circle.	Grand total.
RECEIPTS.													
I. TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(a) Timber	4,62,574	1,505	17,664	4,81,743	13,65,796	8,118	1,08,225	5,868	4,004	12,286	1,958	15,06,247	19,87,990
(b) Firewood and charcoal	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Bamboos	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Sandal-wood	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Grass and other minor produce	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—													
(a) Timber	30,142	3,969	9,194	43,305	3,633	41,094	28,437	38,686	39,198	18,529	21,085	1,90,662	2,33,967
(b) Firewood and charcoal	165	6	13	184	17,498	303	152	183	123	214	205	18,678	18,862
(c) Bamboos	...	...	...	...	...	2,709	2,058	...	...	174	33	4,974	4,974
(d) Grazing and fodder grass	...	...	...	...	...	97	126	...	...	...	...	223	223
(e) Other minor produce	246	30	1,815	2,091	...	419	40,756	1,02,632	2,412	2,528	232	1,48,979	1,51,070
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	79,580	250	79,830	9,492	692	168	5,619	10,186	16,599	11,961	54,707	1,34,537
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—													
(a) Duty on foreign timber and other forest produce	...	41,252	...	41,252	...	...	...	...	...	...	...	...	41,252
(b) Revenue from shared and private forests	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—MISCELLANEOUS—													
(a) Fines and forfeitures	575	2,440	398	3,413	135	568	1,685	3,644	324	623	196	7,175	10,588
(b) Refunds	17	4	...	21	15	...	165	...	30	10	...	220	241
(c) Other sources	351	17,319	313	17,983	3,692	160	712	299	396	2,068	291	7,618	25,601
Total	4,94,070	1,46,105	29,647	6,69,822	14,00,261	54,160	1,82,484	1,56,921	56,673	53,023	35,961	19,39,483	26,09,305

J. TAYLOR,
Assistant Comptroller-General (Forests).

ANNUAL FORM NO. 58 [PRESCRIBED].—*Summary of Expenditure of the different Divisions during 1888-89.*

Budget heads.	Attaran division.	Kado division.	South Tenasserim division.	Total.	Agency.	Rangoon division.	Thayawaddy division.	Prome division.	Western division.	Toungoo division.	Shwegyin division.	Total.	Total Lower Burma.
A—CONSERVANCY AND WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—													
(a) Timber	2,02,804	773	15,445	2,19,022	18,703	77,199	2,05,002	9,842	177	1,63,264	396	4,74,583	6,93,605
(b) Firewood and charcoal	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Bamboos	...	...	...	...	...	...	...	...	...	...	...	...	...
(d) Sandal-wood	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Grass and other minor produce	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—	163	320	...	483	48	1,992	1,089	2,004	1,601	383	...	7,110	7,593
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	30,699	105	30,804	1,384	1,939	372	2,576	5,379	8,978	8,790	29,318	60,122
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—													6,378
(a) Duty on foreign timber and other forest produce	...	6,378	...	6,378	...	...	...	...	...	...	...	...	...
(b) Revenue from shared and private forests	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—RENT OF LEASED FORESTS AND PAYMENTS TO SHAREHOLDERS IN FORESTS MANAGED BY GOVERNMENT.	...	...	...	...	...	...	...	...	...	...	...	...	...
VI.—LIVE-STOCK, STORES, TOOLS AND PLANT—													
(a) Purchase of cattle	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) Feed and keep of cattle	3,372	...	...	3,372	9,475	616	2,668	969	927	632	709	16,190	19,562
(c) Purchase of stores, tools and plant	625	252	74	1,151	2,717	305	413	273	148	241	11	4,108	5,259
VII.—COMMUNICATIONS AND BUILDINGS—													
(a) Roads and bridges	...	...	16	16	80	739	25	12	...	79	...	935	951
(b) Buildings	2,470	169	16	2,655	1,474	275	2,093	777	77	1,526	404	6,626	9,281
(c) Other works	250	...	...	250	347	837	3,392	...	...	154	...	4,730	4,980
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—													
(a) Demarcation	491	...	65	556	...	550	699	33	...	1,150	69	2,521	3,077
(b) Compensation for land and rights	...	...	...	...	...	...	...	...	...	100	...	100	100
(c) Surveys and working plans	22	...	75	97	307	...	9,438	122	...	6	...	9,873	9,970
(d) Sowing and planting	8,756	...	1,322	10,078	...	4,870	27,780	2,170	...	1,533	30	36,383	46,461
(e) Protection from fire	5,253	...	...	5,253	...	2,653	6,063	968	...	2,493	...	12,177	17,430
(f) Other works	...	70	162	238	...	9	111	12	...	638	...	770	1,008
IX.—MISCELLANEOUS—													
(a) Refunds	...	1,489	2,049	3,538	...	...	480	...	71	...	27	578	4,116
(b) Law charges	...	239	...	239	...	163	9	11	35	...	...	211	450
(c) Other charges	1,016	1,059	64	2,139	440	49	1,346	490	2,164	102	1	4,592	6,731
Total A.—Conservancy and Works	2,25,422	41,448	19,999	2,86,869	34,975	92,196	2,61,166	20,259	10,479	1,81,279	10,451	6,10,805	8,97,074
B.—ESTABLISHMENT.													
I.—SALARIES—													
(a) Conservators	17,518	...	...	17,518	12,942	...	...	...	...	...	...	12,942	30,460
(b) Superior officers	18,600	7,397	2,800	28,787	18,976	10,140	8,039	9,700	9,600	9,592	5,960	72,030	1,00,807
(c) Subordinate forest and depôt establishments	7,504	6,502	2,788	16,894	9,336	6,325	8,939	5,691	3,690	6,144	3,789	43,903	60,797
(d) Office establishments	8,753	6,253	1,703	16,709	16,661	4,124	4,185	1,924	1,488	2,561	1,455	32,398	49,107
(e) Deputation and special allowances	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—TRAVELLING ALLOWANCES—													
(a) Conservators	890	...	...	890	1,944	...	27	...	...	...	...	1,971	2,861
(b) Superior officers	1,825	2,294	768	4,887	1,247	2,151	4,055	2,642	2,290	1,721	969	15,079	19,966
(c) Subordinate forest and depôt establishments	912	467	106	1,485	1,086	1,584	1,674	866	983	573	771	7,537	9,022
(d) Office establishments	102	...	42	144	148	536	364	106	271	154	64	1,663	1,807
III.—CONTINGENCIES—													
(a) Stationery	...	...	...	...	45	2	1	5	...	3	...	59	59
(b) Carriage of tents and records	28	...	...	28	14	27	6	...	18	7	...	72	100
(c) Rents, rates, and taxes	48	35	...	83	3,003	3	635	144	80	23	...	3,888	3,971
(d) Pay of police guards	...	...	...	...	...	...	...	...	...	...	...	...	...
(e) Official postage	96	80	20	196	358	72	131	132	100	70	35	898	1,094
(f) Sundries	538	73	28	639	968	291	855	483	133	109	119	2,958	3,597
Total B.—Establishments	56,814	23,191	8,255	88,260	66,721	25,255	28,904	21,692	18,657	20,957	13,202	1,95,388	2,83,648
GRAND TOTAL OF EXPENDITURE	2,82,236	64,639	27,654	3,74,529	1,01,696	1,17,451	2,90,070	41,951	29,136	2,02,236	23,653	8,06,193	11,80,722

CALCUTTA :
The 14th June 1889.

J. TAYLOR,
Assistant Comptroller-General (Forests).

Dr. ANNUAL FORM NO. 59 (PRESCRIBED).—*Account-current for the year 1888-89.* *Cr.*

TENASSERIM CIRCLE.			Rs. A. P.	Rs. A. P.
To Cash balance			.....	397 2 0
To VIII.—Assessed Taxes—				
Income-tax deductions from salaries			.....	1,548 10 9
Revenue as per Annual Summary Form No. 58			.....	6,69,821 14 0
To Service Funds—				
Civil Fund, Ordinary, Bengal			.....	.....
Civil Fund, Additional, Bengal			.....	.....
Military Fund, Bengal			.....	.....
Military Fund, Madras			523 2 6	.....
Military Orphan Fund, Bengal			.....	.....
Uncovenated Service Family Pension Fund, Bengal			1,359 13 0	.....
General Family Pension Fund			.....	.....
Hindu Family Annuity Fund			.....	.....
				1,882 15 6
To Deposits			.....	.....
To Forest Cash Remittances (Local)—				
Forest cheques drawn			3,51,013 13 0	.....
Inter-divisional transfers			998 12 2	.....
				3,52,012 9 2
Advances recoverable			.....	1,16,157 4 1
Suspense			.....	.....
To Account-current (other Governments)—				
Remittances from Government of			.....	.....
To Inter-departmental Transfers—				
Public Works Department			.....	.....
Military Department			.....	.....
To Civil Department—				
Jails		90 0 0	.....	.....
Mathematical Instrument Department		30 8 0	.....	.....
Miscellaneous		.....	.....	.....
Law and Justice		1,058 0 0	.....	.....
			1,178 8 0	.....
				1,178 8 0
	Total	...	.....	11,42,998 15 6

TENASSERIM CIRCLE.			Rs. A. P.	Rs. A. P.
By Expenditure as per Annual Summary Form No. 58			.....	3,74,599 0 3
Deposits			.....	.....
By Forest Cash Remittances (Local)—				
Remmittances to treasuries			6,45,916 13 8	
Inter-divisional transfers			127 0 0	6,46,043 13 8
Advances recoverable			.....	97,046 4 8
Suspense			.....	.....
By Account-current (other Governments)—				
Remittances to the Government of Bombay			6,650 9 2	
Remittances to the Government of India			1,506 8 0	
Remittances to the Government of Madras			9,973 8 0	
				18,130 9 2
By Inter-departmental Transfers—				
Public Works Department			.....	.....
Military Department			.....	.....
To Civil Department—				
Jails		5,774 7 2		
Law and Justice		1,058 0 0		
			6,832 7 2	6,832 7 2
Cash balance			.....	416 12 7
	Total	...	.....	11,42,998 15 6

PEGU CIRCLE.	Rs. A. P.	Rs. A. P.
To Cash balance	.....	2,653 14 5
To VIII.—Assessed Taxes—		
Income-tax deductions from salaries	.....	3,114 2 10
Revenue as per Annual Summary Form No. 58	.....	19,39,492 12 3
To Service Funds—		
Civil Fund, Ordinary, Bengal	.....	
Civil Fund, Additional, Bengal	.....	
Military Fund, Bengal	.....	
Military Fund, Madras	.....	
Military Orphan Fund, Bengal	.....	
Uncovenanted Service Family Pension Fund, Bengal	1,186 13 0	
General Family Pension Fund	.....	
Hindu Family Annuity Fund	.....	
		1,186 13 0
To Deposits	.....	
To Forest Cash Remittances (Local)—		
Forest cheques drawn	8,34,936 1 8	
Inter-divisional transfers	99,802 15 3	
		9,24,739 0 11
To Advances recoverable	.....	3,08,623 6 3
Suspense	.....	
To Account-current (other Governments)—		
Remittances from Government of India	.....	2,777 8 0
To Inter-Departmental Transfers—		
Public Works Department	.....	
Military Department, Bengal	2,025 6 6	
Military Department, Madras	92 11 4	
To Civil Department—	Rs. A. P.	
Jails	.....	
Mathematical Instrument Department	.....	
Miscellaneous	375 7 0	
Telegraph Department	5 0 0	
	.....	
	380 7 0	
		2,498 8 10
Total	.....	31,85,076 2 6

PEGU CIRCLE.	Rs. A. P.	Rs. A. P.
By Expenditure as per Annual Summary Form No. 58	.....	8,06,193 4 9
Deposits	.....	
By Forest Cash Remittances (Local)—		
Remittances to treasuries	16,43,568 15 6	
Inter-divisional transfers	93,595 7 10	
		17,37,164 7 4
By Advances recoverable	.....	3,21,612 7 7
By Suspense	.....	551 8 9
By Account-current (other Governments)—		
Remittances to the Government of Madras	1,82,574 1	
Remittances to the Government of India	29 8 0	
		1,82,603 9
By Inter-Departmental Transfers—		
Public Works Department, State Railways	77,058 5 1	
Public Works Department, other branches	16,655 10 10	
Military Department, Bengal	172 12 0	
By Civil Department—	Rs. A. P.	
Jails	28,061 1 0	
Miscellaneous	810 0 5	
	28,871 1 5	
Marine Department	12,974 15 6	
		1,35,633 12 10
By Cash balance	.....	1,319 0 2
Total	.....	31,85,076 2 6

J. TAYLOR,
Assistant Comptroller-General (Forests).

Dr. ANNUAL FORM NO. 59A.—*Account-current for the year 1888-89.* *Cr.*

	Tenasserim circle.	Pegu circle.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
To Cash balance	397 2 0	2,653 14 5	3,051 0 5
To VIII—Assessed Taxes—			
Income-tax deductions from salaries ...	1,548 10 9	3,114 2 10	4,662 13 7
Revenue as per Annual Summary Form No. 58 ...	6,69,821 14 0	19,39,482 12 3	26,09,304 10 3
To Service Funds—			
Civil Fund, Ordinary, Bengal	.....	.....	.....
Civil Fund, Additional, Bengal	.....	.....	.....
Military Fund, Bengal	.....	.....	.....
Military Fund, Madras	523 2 6	.....	523 2 6
Military Orphan Fund, Bengal	.....	.....	.....
Uncovenanted Service Family Pension Fund, Bengal	1,359 13 0	1,156 13 0	2,546 10 0
General Family Pension Fund	.....	.....	.....
Hindu Family Annuity Fund	.....	.....	.....
To Deposits	.....	.....	.....
To Forest Cash Remittances (Local)—			
Forest cheques drawn	3,51,013 13 0	8,34,936 1 8	11,85,949 14 8
Inter-divisional transfers	998 12 2	89,803 15 3	90,801 11 5
Advances recoverable	1,16,157 4 1	3,08,623 6 3	4,24,780 10 4
Suspense	.....	.....	.....
To Account-current (other Governments)—			
Remittances from Government of India	.....	2,777 8 0	2,777 8 0
To Inter-departmental Transfers—			
Public Works Department	.....	.....	.....
Military Department, Bengal	.....	2,025 6 6	2,025 6 6
Military Department, Madras	.....	92 11 4	92 11 4
To Civil Department—			
Jails	90 0 0	.....	90 0 0
Mathematical Instrument Department	30 8 0	.....	30 8 0
Miscellaneous	.....	375 7 0	375 7 0
Telegraph	.....	5 0 0	5 0 0
Law and Justice	1,058 0 0	.....	1,058 0 0
Total ...	11,42,998 15 6	31,85,076 2 6	43,28,075 2 0

	Tenasserim circle.	Pegu circle.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
By expenditure as per Annual Summary Form No. 58 ...	3,74,529 0 3	8,06,193 4 9	11,80,722 5 0
Deposits	.....	.....	.....
By Forest Cash Remittances (Local)—			
Remittances to treasuries	6,45,916 13 8	16,43,568 15 6	22,89,485 13 2
Inter-divisional transfers	127 0 6	93,595 7 10	93,722 7 10
Advances recoverable	97,046 4 8	3,21,612 7 7	4,18,658 12 3
Suspense	.....	551 8 9	551 8 9
By Account-current (other Governments)—			
Remittances to the Government of Bombay ...	6,650 9 2	.....	6,650 9 2
Remittances to the Government of India	1,506 8 0	29 8 0	1,536 0 0
Remittances to the Government of Madras ...	9,973 8 0	1,82,574 1 1	1,92,547 9 1
By Inter-departmental Transfers—			
Public Works Department, State Railways	.....	77,058 5 1	77,058 5 1
Public Works Department, other branches	.....	16,655 10 10	16,655 10 10
Military Department, Bengal	.....	172 12 0	172 12 0
By Civil Department—			
Jails	5,774 7 2	28,061 1 0	33,835 8 2
Law and Justice	1,058 0 0	810 0 5	1,868 0 5
Marine Department	.....	12,874 15 6	12,874 15 6
By Cash balance	416 12 7	1,318 0 2	1,734 12 9
Total ...	11,42,998 15 6	31,85,076 2 6	43,28,075 2 0

ANNUAL FORM NO. 60 [PRESCRIBED].—*Revenue received and Outstandings on account of Revenue during 1888-89.*

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year	Balance due to the department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
ATTARAN	Timber and other produce, &c.	3,455 0 0	4,92,020 2 2	4,95,475 2 2	4,94,070 2 2	1,405 0 0	
KADO	Timber and other produce	.....	1,46,104 6 10	1,46,104 6 10	1,46,104 6 10	.....	
SOUTH TENASSERIM ...	Timber and other produce, &c.	.....	29,647 5 0	29,647 5 0	29,647 5 0	.....	
	Total Tenasserim Circle ...	3,455 0 0	6,67,771 14 0	6,71,226 14 0	6,69,821 14 0	1,405 0 0	
PROME ...	Timber and other produce, &c.	.....	1,56,920 12 1	1,56,920 12 1	1,56,920 12 1	.....	
THARRAWADDY ...	Ditto	.....	1,82,483 13 4	1,82,483 13 4	1,82,483 13 4	.	
RANGOON	Ditto	....	54,159 8 10	54,159 8 10	54,159 8 10	...	
TOUNGOO	Ditto	.....	53,475 0 6	53,475 0 6	53,022 12 0	452 4 6	
WESTERN ...	Ditto	.....	56,673 15 4	56,673 15 4	56,673 15 4	.....	
SHWEGYIN ..	Ditto	. .	35,961 4 0	35,961 4 0	35,961 4 0	.....	
AGENCY .. .	Ditto	61,471 8 0	14,06,519 10 8	14,67,991 2 8	14,00,260 10 8	67,730 8 0	
	Total Pegu Circle ..	61,471 8 0	19,46,194 0 9	20,07,665 8 9	19,39,482 12 3	68,182 12 6	
	GRAND TOTAL LOWER BURMA ..	64,926 8 0	26,13,965 14 9	26,78,892 6 9	26,09,304 10 3	69,587 12 6	

ANNUAL FORM NO. 61 [PRESCRIBED].—*Statement of Outstandings and Liabilities on account of Contractors and Disbursers for 1888-89.*

Division.	Department debtor.			Department creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Attaran	.....	1,11,183 1 11	1,11,183 1 11	36,111 15 9	92,293 12 6	1,28,405 12 3	17,222 10 4	.....	
Kado	.....	3,521 10 0	3,521 10 0	1,595 4 0	3,330 0 0	4,925 4 0	1,403 10 0	.....	
South Tenasserim	.....	1,452 8 2	1,452 8 2	60 0 0	1,422 8 2	1,482 8 2	30 0 0	.....	
Total Tenasserim Circle ...	.....	1,16,157 4 1	1,16,157 4 1	37,767 3 9	97,046 4 8	1,34,813 8 5	18,656 4 4	.....	
Agency	.....	2,350 10 9	2,350 10 9	1,025 6 10	1,807 14 1	2,833 4 11	482 10 2	.....	
Rangoon	.....	43,123 7 4	43,123 7 4	2,356 0 4	41,970 13 7	44,326 13 11	1,203 6 7	.....	
Tharrawaddy	.....	1,82,787 1 2	1,82,787 1 2	28,296 3 7	1,78,001 0 11	2,06,297 4 6	23,510 3 4	.....	
Prome	.....	32,691 13 6	32,691 13 6	4,219 9 6	32,771 7 7	36,991 1 1	4,299 3 7	.....	
Western	.....	6,562 1 2	6,562 1 2	3,453 5 1	3,571 6 8	7,024 11 9	462 10 7	.....	
Toungoo	.....	40,934 4 4	40,934 4 4	418 12 9	63,389 12 9	63,808 9 6	22,874 5 2	.....	
Shwegyin	.....	174 0 0	174 0 0	74 0 0	100 0 0	174 0 0	.....	.....	
Total Pegu Circle ..	.....	3,08,623 6 3	3,08,623 6 3	39,843 6 1	3,21,612 7 7	3,61,455 13 8	52,832 7 5	.....	
GRAND TOTAL LOWER BURMA ...	.....	4,24,780 10 4	4,24,780 10 4	77,610 9 10	4,18,658 12 3	4,96,269 6 1	71,488 11 9	.....	

CALCUTTA:
The 14th June 1889.

J. TAYLOR,
Assistant Comptroller-General (Forests).

ANNUAL FORM NO. 62 [PRESCRIBED].—*Statement showing the Financial Results in the Tenasserim and Pegu Circles for 1888-89.*

Division.		Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.		Remarks.
		Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Tenasserim	Attaran	52,000	26,048	18,076	7,997	9,358	70,076	45,403	
	East Salween	2,56,927	1,19,629	9,161	7,836	11,946	2,65,508	1,39,411	
	West Salween	1,54,247	76,435	4,239	2,192	13,296	1,58,486	91,923	
	Kado	1,505	1,324	1,44,600	67,595	...	1,46,105	68,919	
	South Tenasserim	17,664	17,058	11,983	6,992	4,823	29,647	28,873	
	Total	4,81,743	2,42,494	1,88,079	92,612	39,423	6,69,822	3,74,529	
Pegu	Prome	84,984	33,015	1,45,443	13,609	13,880	2,30,427	61,504	
	Tharrawaddy	7,38,168	2,39,615	74,091	18,387	61,397	8,12,259	3,19,399	
	Rangoon	3,64,750	1,02,067	45,350	14,424	20,514	4,10,100	1,37,005	
	Toungoo	3,28,731	1,94,266	24,146	8,550	18,973	3,52,877	2,21,789	
	Shwegyin	26,120	17,466	22,043	6,701	6,819	48,163	30,986	
	Western	15,622	15,589	42,484	8,746	7,143	58,106	31,578	
	Agency	2,578	3,932	24,973	...	...	27,551	3,992	
	Total	15,60,953	6,06,050	3,78,530	70,417	1,29,736	19,39,483	8,06,198	
Grand Total Lower Burma		20,42,696	8,48,544	5,66,609	1,63,029	1,69,149	26,09,305	11,80,732	

APPENDIX A.

Statement showing the cost of feed of Elephants of the Forest Department for the official year 1888-89 as compared with that of the Commissariat Department for the same period.

Division.	Number of elephants at commencement of the year.	Casualties during the year.	Number of elephants at close of the year.	Cost of feed.	Cost of keep, including gear, &c.	Cost of medicine.	Total expenditure for the year.	Average monthly cost per animal of the Forest Department.	Average monthly cost per animal of the Commissariat Department.	Amount paid by officers for carriage elephants.	Value of labour in cash receipts and work performed.	Remarks.
TENASSERIM CIRCLE.				Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Attaran	5*	...	5	1,082 13 11	1,248 0 0	.....	2,330 13 11				2,312 0 0	* Includes a calf.
East Salween	2	1	1	...	499 14 3	.....	499 14 3	31 10 4	46 6 4	.....	134 0 0	
West Salween...	1	...	1	...	312 0 0	.....	312 0 0				268 0 0	
Total ...	8	1	7	1,082 13 11	2,059 14 3	.....	3,142 12 2	.....	.....	.....	2,714 0 0	
PEGU CIRCLE.												
Prome	2	...	2	1 8 0	957 10 0	10 0 0	969 2 0				1,060 0 0	
Tharrawaddy	11	1	10	3 0 0	2,735 1 9	129 15 9	2,868 1 6				5,890 0 0	
Rangoon	2	...	2	31 8 0	584 9 3	.. ...	616 1 3				928 0 0	
Toungoo	1	...	1	7 0 0	619 2 3	5 8 0	631 10 3	39 10 10	50 12 8†	.....	1,850 0 0	† Pegu circle elephants except in Rangoon are not fed on paddy, hence the higher rate for the Commissariat elephant.
Shwegyin	2	...	2	.....	647 15 6	55 0 0	702 15 6				610 0 0	
Western	4	...	4	.....	925 9 6	1 8 6	927 2 0				3,031 0 0	
Agency	13	1	12	4,906 2 3	4,304 7 1	264 9 0	9,475 2 4				23,562 0 0	
Total ...	35	2	33	4,949 2 3	10,774 7 4	466 9 3	16,190 2 10	.....	.....	.....	36,931 0 0	
GRAND TOTAL LOWER BURMA ...	43	3	40	6,032 0 2	12,834 5 7	466 9 3	19,332 15 0	.....	.....	.....	39,645 0 0	

APPENDIX B.

LOWER BURMA, TENASSERIM AND PEGU CIRCLES.

List of Buildings of which the cost exceeds Rs. 200 and for occupation of which no Rent is paid.

Division.	No.	Name of building.	Station.	Remarks.
Attaran	1	Forest office	Moulmein.	
	2	Elephant-sheds		
	1	Paddy-shed		
	1	Rest house	Natchaung.	
	1	Guard-house	Nantè	
	4	Guard-houses	Moulmein.	
East Salween	1	Bungalow	Kawkareik.	
	1	Rest-house	Gyaing on the Haungdraw.	
	1	Guard-house	Gyaing.	
South Tenasserim	1	Office	Mergui.	
	1	Guard-house	Tavoy.	
Kado	1	Guard-house	Martaban.	
	1	Guard-house	Moulmein ...	Mopun.
	3	Office and two out-houses ...	Kado.	
	1	Lascar's house		
	1	Upper guard-house ...		
	1	Lower guard-house ...		
	1	Coal-shed	Battery Point.	
	1	Bungalow	Shwegun.	
		(a) On which no rent is paid.		
Prome	3	Rest-houses	Kadinngaziu, Tindaw, and Paunglè.	
	1	Ranger's quarters ...	Kadinngazin ...	Built during the year
Tharrawaddy	1	Forest office	Tharrawaddy.	
	1	Forest bungalow ...	Paungdè.	
	6	Rest-houses	We, Kaunglaungdaing, Kwingyi, Themè, Yethò, and Seywa.	
Rangoon	1	Forest bungalow ...	Pegu.	
	3	Revenue stations ...	Tawlatè, Hlegu, and Pegu.	
	2	Rest-houses	Palôn and Kinbadi.	
Toungoo	1	Forest office	Toungoo.	
	6	Rest-houses	Tabotkwè Zibyubin, Banbwebin. Minye, Pathichaung, Pyunchaung.	
	1	Overseer's quarters ...	Toungoo ..	Built during the year.
Shwegyin	1	Rest-house	Myitkyo.	
	1	Depôt gaung's quarters ...		
Agency	1	Officer's quarters ...	Kemmendine.	
	1	Overseer's house ...		
	6	Guard-houses		
	1	Mahout's quarters ...		
	1	Elephant-shed		
	1	Seasoning-shed		
		(b) On which rent is paid.		
Prome ...	1	Forest office	Prome.	
Tharrawaddy ...	1	First class bungalow ...	Tharrawaddy.	
Toungoo ...	1	Ditto ...	Toungoo.	
Shwegyin ...	1	Forest officer's quarters ...	Shwegyin.	

APPENDIX C.

Statement showing the Exports of Timber and other Forest Produce from the Port of Rangoon during the official year 1888-89 (Private and Government).

Articles and countries to which exported.	Rangoon.	
	Quantity.	Value.
		Rs.
Wood—		
Teak—		
To United Kingdom ... ... C. tons	15,997	17,71,419
,, Italy, Genoa ... ... ,,	14	1,460
,, Italy, Spezzia ... ... ,,	.....	.....
,, France, Bordeaux ... ... ,,	.....	.....
,, Malta ... ... ,,	10	1,258
,, Spain, Gibralta ... ... ,,	203	25,400
,, Egypt, Port Said ... ... ,,	320	33,100
,, Ceylon ... ... ,,	1,123	95,880
,, Straits Settlements ... ... ,,	194	22,513
,, Bengal, Calcutta ... ... ,,	9,878	6,47,202
,, Bengal, other ports ... ... ,,	108	9,802
,, Bombay, Bombay ... ... ,,	19,681	12,35,551
,, Madras, Madras ... ... ,,	13,370	8,84,328
,, Madras, other ports ... ... ,,	1,577	1,25,257
,, Provincial ports ... ... ,,	485	46,317
,, Karikal ... ... ,,	.....	.....
,, Pondicherry ... ... ,,	.....	.....
Total ...	62,969	48,90,547
Other timber—		
To Malta ... ... Tons	.....	.....
,, Ceylon ... ... ,,	.....	.....
,, Cochin-China, Saigon ... ... ,,	1	96
,, Bengal, Calcutta ... ... ,,	135	8,167
,, Bengal, other ports ... ... ,,	4	178
,, Bombay, Bombay ... ... ,,	.....	.....
,, Madras, other ports ... ... ,,	1	100
,, Provincial ports ... ... ,,	41	617
,, Karikal ... ... ,,	.....	.....
,, Pondicherry ... ... ,,	.....	.....
Total	182	9,178
Firewood—		
To Provincial ports ... ... Tons	6	26
Sandal-wood—		
To Provincial ports ... ... Value	.....	779
Teak Railway keys—		
To United Kingdom ... ... Cwt.	2,107	5,437
,, Bengal, Calcutta ... ... ,,	4,581	5,526
,, Bombay, Bombay ... ... ,,	.....	.....
,, Madras, Madras ... ... ,,	672	856
,, Madras, other ports ... ... ,,	2,890	4,877
,, Provincial ports ... ... ,,	2,051	4,805
Total ...	12,671	21,501
Wooden sleepers—		
To Bengal ... ... Cwt.	14,086	48,300
,, Bombay ... ... ,,	4,560	23,059
Total ...	18,646	71,449
Manufactures of—		
To United Kingdom ... ... Value	.....	100
,, France, Bordeaux ... ... ,,	.....	.....
,, France, St. Nazaire ... ... ,,	.....	.....
,, France, Marseilles ... ... ,,	.....	.....
,, Malta ... ... ,,	.....	.....
,, Egypt, Port Said ... ... ,,	.....	.....
,, Mauritius ... ... ,,	.....	.....
,, Ceylon ... ... ,,	.....	32,650
,, Siam ... ... ,,	.....	65
,, Straits Settlements ... ... ,,	.....	9,680
,, Bengal, Calcutta ... ... ,,	.....	836
,, Bengal, other ports ... ... ,,	.....	4,208
,, Bombay, Bombay ... ... ,,	.....	255
,, Madras, Madras ... ... ,,	.....	3,010
,, Madras other ports ... ... ,,	.....	23,119
,, Provincial ports ... ... ,,	.....	10,072
,, Pondicherry ... ... ,,	.....	31,171
Total ...	.....	116,156
Gums and Resins—		
Cutch and Gambier—		
To United Kingdom ... ... Cwt.	151,126	22,67,750
,, Austria, Trieste ... ... ,,	600	9,600
,, France, Havre ... ... ,,	1,700	25,900
,, France, Marseilles ... ... ,,	100	1,644
,, Germany, Hamburg ... ... ,,	400	6,400
,, Holland ... ... ,,	1,105	16,575
,, Egypt, Port Said ... ... ,,	24,283	3,51,600
,, St. Helena ... ... ,,	10,170	1,52,700
,, Ceylon ... ... ,,	901	18,027
,, China, Hongkong ... ... ,,	558	8,503
,, Straits Settlements ... ... ,,	15,142	2,28,270
,, Bengal, Calcutta ... ... ,,	110,980	16,34,675
,, Bengal, other ports ... ... ,,	16	299
,, Bombay, Bombay ... ... ,,	19,457	2,77,352
,, Madras, Madras ... ... ,,	3,074	42,118
,, Madras, other ports ... ... ,,	1,818½	31,790
,, Provincial ports ... ... ,,	168	3,795
Total ...	341,607½	50,67,903

APPENDIX C.

Statement showing the Exports of Timber and other Forest Produce from the Port of Rangoon during the official year 1888-89 (Private and Government)—concluded.

Articles and countries to which exported.		RANGOON.	
		Quantity.	Value.
LAC—			Rs.
Stick—			
To Bengal, Calcutta	Cwt.	1,084	18,190
,, Madras, Madras	,,	1,958	33,278
,, Madras, other ports	,,	484	8,560
,, Provincial ports	,,	204	5,663
Total ...		3,730	65,640
OILS—			
Wood—			
To United Kingdom	Galls.	30	60
,, Bengal, Calcutta	,,	1,055	455
,, Bengal, other ports	,,	.....	.....
,, Madras, Madras	,,	10,816	8,612
,, Madras, other ports	,,	1,281	925
,, Provincial ports	,,	100	60
Total ...		13,282	10,112

APPENDIX C. (*a*).

Statement showing the Imports of Timber and other Forest Produce into the Port of Rangoon during the official year 1888-89 (Private and Goverment).

Articles and countries from which imported		RANGOON.	
		Quantity.	Value.
WOOD—			Rs.
Teak—			
From Provincial ports	C. tons	1,606	1,54,552
Other timber—			
From United Kingdom	Tons	84	1,840
,, Java	,,	1	30
,, Straits Settlements	,,	152	10,099
,, Bengal, other ports	,,	130	4,620
,, Provincial ports	,,	752	29,005
Total ...		1,119	46,564
Firewood—			
From Siam	Tons	129	1,248
,, Straits Settlements	,,	174	1,904
,, Provincial ports	,,	451	2,198
Total ...		754	5,440
Sandal-wood—			
From Straits Settlements	Value	.....	986
,, Bengal, Calcutta	,,	.....	2,240
,, Bombay, Bombay	,,	.....	12,802
,, Madras, Madras	,,	.....	5,825
,, Provincial ports	,,	.....	3,654
Total ...		.....	25,507
Railway keys—			
From Provincial ports	Cwt.	.....	.....
Wooden sleepers—			
From Provincial ports	Cwt.	920	936
Manufactures of—			
From United Kingdom	Value	.....	34,686
,, Ceylon	,,	.....	50
,, Straits Settlements	,,	.....	92,336
,, Bengal, Calcutta	,,	.....	60,119
,, Bengal, other ports	,,	.....	354
,, Bombay, Bombay	,,	.....	1,242
,, Madras, Madras	,,	.....	266
,, Madras, other ports	,,	.....	27
,, Provincial ports	,,	.....	71,889
Total ...		.....	2,60,909
GUMS AND RESINS—			
Cutch and gambier—			
From Bengal, Calcutta	Cwt.	30½	628
,, Bombay, Bombay	,,	32	768
,, Provincial ports	,,	.....	.....
Total ...		62½	1,396
LAC—			
Stick—			
From Bengal, Calcutta	Cwt.	1,171	20,357
,, Provincial ports	,,	12	245
Total ...		1,183	20,602
OILS—			
Wood—			
From Straits Settlements	Galls.	1,031	1,638
,, Provincial ports	,,	19,114	7,040
Total ...		20,145	8,673

APPENDIX C (1).

Statement showing the Exports of Teak Timber from Moulmein during the year 1888-89.

Countries to which exported.		Quantity.	Value.
			Rs.
United Kingdom	Tons	22,788	25,41,102
France, Bordeaux	,,	6	549
Italy, Spezzia	,,	780	73,030
Spain, Gibraltar	,,	4,185	5,52,774
Egypt, Port Said	,,	3,548	3,72,008
Ceylon	,,	617	37,891
Bengal, Calcutta	,,	24,270	17,96,747
Bengal, other ports	,,	414	30,602
Bombay, Bombay	,,	27,885	17,02,912
Madras, Madras	,,	205	22,004
Madras, other ports	,,	5,427	3,40,920
Provincial ports	,,	1,580	1,41,848
Karikal	,,	21	625
Pondicherry	,,	1,089	1,07,217
Total ...		93,465	77,21,819

APPENDIX C (2a).

Statement showing the Exports of Shingles, Railway Keys, and Woods of other kinds from Moulmein, Tavoy, and Mergui during the year 1888-89.

Articles.	Whither exported.	Moulmein.		Tavoy.		Mergui.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.
Other timber ...	Malta ... ... Tons	1	48	...	...	...	...
	Ceylon ... ... ,,	½	9	...	...	...	...
	Bengal, Calcutta ... ... ,,	1,254	69,692	..	..	..	..
	Bombay, Bombay ... ... ,,	315	13,791	..	...	...	..
	Madras, other ports ... ,,	322	7,454	...	...	...	...
	Provincial ports ... ... ,,	716	20,948	220	6,955	½	20
	Karikal ... ... ,,	5	100	...	...	...	..
	Pondicherry ... ... ,,	36	1,087	...	..	...	...
Teak railway keys.	United Kingdom ... ... Cwt.	2,728	6,204	...	...	...	...
	Bengal, Calcutta ... ... ,,	4,396	8,505	...	...	...	...
	Bombay, Bombay ... ... ,,	2,603	4,934	...	...	...	...
	Provincial ports ... ... ,,	150	1,500	...	...	...	...
Teak shingles, staves, ventilators.	France, Bordeaux	...	477	...	...	...	...
	France, St. Nazaire...	...	180	...	...	...	...
	France, Marseilles	...	200	..	...	...	...
	Malta	...	1,329	...	...	...	...
	Mauritius	...	2,607	...	...	...	...
	Ceylon	...	30,723	...	...	...	...
	Straits Settlements	...	11,003	...	...	...	...
	Bengal, Calcutta	...	11,360	...	...	...	...
	Bengal, other ports	...	35,780	...	...	...	...
	Madras, other ports	...	2,444	...	...	...	...
	Provincial ports	...	368	...	...	...	...

APPENDIX C (2b).

Statement showing the Exports of Boat-hulls and other Timber from the Port of Tavoy during the years 1887-88 and 1888-89.

Articles.	Whither exported.	1887-88.		1888-89.	
		Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.
Boat-hulls	Provincial ports ... ... No.	47	43,250	61	61,500
Other timber ...	Ditto . ... Tons	917	34,684	220	6,955
	Total ...	...	77,934	...	68,455

APPENDIX C (3)

Statement showing the Exports of Minor Forest Produce from the Ports of Mergui, Tavoy, and Moulmein during 1888-89.

Articles.	Whither exported.		Moulmein.		Tavoy.		Mergui.	
			Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
				Rs.		Rs.		Rs.
Stick-lac ...	Provincial ports ...	Cwt.	15	310	...	...	...	...
Wood-oil	Bengal, Calcutta ...	Galls.	728	374	...	..	...	...
	Madras, Madras ...	,,	600	240	...	...	...	...
	Madras, other ports ...	,,	1,542	642	...	...	...	...
	Provincial ports ...	,,	592	264	...	...	Viss 67,630	7,606
Sandal-wood . .	Ditto ...	,,	...	4	...	...	,, 14,415	2,783
Firewood	Ditto ...	Tons	808	1,212	No. 12,100	127	No. 2,700	182
Tanning bark	Ditto ...	,,	...	...	362	1,252	...	...
Ondòn bark	Ditto ...	,,	...	...	17	825	...	..
Cardamon	Ditto ...	lbs.	...	...	15,108	4,860	490	618
Dammer torches ...	Ditto ...	No.	...	...	1,500	80	3,05,075	21,304
Kanyin fruit ...	Ditto ...	Bkts.	...	...	1 117	1,047	1,194	5,210
Akyaw wood ...	Ditto ...	Viss.	...	...	...	...	...	...
Pyu bark	Ditto ...	,,	...	...	...	—	99,564	589
Rattans	Ditto ...	No.	...	...	...	...	7,397,350	26,929
Fibres	Ditto ...	Viss	...	...	...	...	3,000	163
Redwood	Ditto ...	,,	...	...	...	...	96,281	6,826
Karawè leaves ...	Ditto ...	,,	...	...	...	...	1,750	85
Karawè fruit	Ditto ...	,,	...	...	...	...	100	62
Dammer	Ditto ...	,,	...	...	...	...	1,000	139
Honey	Ditto ...	,,	...	...	...	...	1,950	1,145
Bees-wax	Ditto ...	,,	...	...	...	...	185	558

APPENDIX C (4).

Statement showing the Imports of Timber and other Forest Produce during the year 1888-89 into the Ports of Mergui, Tavoy, and Moulmein.

Articles.	Whence imported.		Moulmein.		Tavoy.		Mergui.	
			Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
				Rs.		Rs.		Rs.
Firewood . ..	Provincial ports .	Tons	...	...	1	3	.	..
Vegetable fibre for cordage	Ditto ...	Cwt.	...	...	16	50	..	...
Dammer torches ...	Ditto ...	No.	...	..	1,500	70	250	57
Rattans	Ditto ..	,,	...	...	...	...	109,000	456
Dammer	Ditto ..	Viss.	...	...	...	...	100	15

APPENDIX D.

TENASSERIM CIRCLE.

Statement of Teak Trees girdled during the season 1888-89.

Name and No. of section.	Girdling officer.	Revising officer.	Forest district.	Locality.	Number of teak trees girdled.	Remarks.
	Mr. T. A. Hauxwell, Deputy Conservator of Forests.	Mr. T. A. Hauxwell, Deputy Conservator of Forests.	...	*Upper reaches of Uyu chaung.* Above Tikpotaw, west bank	15	
				Above Tikpotaw, east bank	31	
				Kanlè chaung, west bank	414	
				Kanlè chaung, east bank	408	
				Gawlè river, east bank	23	
				Wakuè chaungbya	75	
				Mawasku	29	
				Total ...	995	

PEGU CIRCLE.

Statement of Teak Trees girdled during the season 1888-89.

Division.	Girdling officer.	Revising officer.	Range.	Forest district	Locality.	Number of teak trees girdled.	Remarks
Prome.	Maung Aung, Forest Ranger.	Mr. F. W. Thellusson, Deputy Conservator of Forests.	Nawin ...	Middle Nawin unreserved forests.	North bank of the Chaungzauk chaung, between Pemasin and Kadin-Ngazin village.	433	
					North bank of the Chaungzauk chaung, south-west of Bambwedaung village.	114	
					North bank of the Gwècho chaung, north of Aingyi-naung village.	453	
					Total Nawin ...	1,000	
	Maung Pe ...	Mr. H. Jackson, Deputy Conservator of Forests.	Myedè ...	Padè	On both banks of the Tindaw chaung and tributaries.	528	
					Padè watershed	60	
					Lethadaung forests	112	
					Pyaungthi forests	57	
					Total Myedè ...	756	
	Maung Tha Shun.	Mr H. Jackson, Deputy Conservator of Forests.	Kama ...	Mindôn forests	On the Kyauktabo chaung, tributary to Mindôn ...	80	
					On the Ale chaung, tributary to Mindôn ...	153	
					On the Chinnit chaung, tributary to Mindôn ...	367	
					Total Kama ...	600	
					Total Prome ...	2,356	
Tharrawaddy.	Maung Wo, Forest Ranger.	.....	Thônzè ...	Thônzè Working circle.	Compartment No. 4 (part)	14	Inside reserves.
					Compartment No. 8 (part)	156	
					Compartment No. 16 (part)	65	
					Compartment No. 23	58	
					Total Thônzè ...	293	
	Mr. G. Q. Corbett, Assistant Conservator of Forests.	.....	Thônzè ...	Kôn-Bilin Working circle.	Compartment No. 28	242	
					Compartment No. 29	141	
					Compartment No. 30 (part)	117	
					Total Kôn-Bilin ...	500	
	Mr. G. Q. Corbett, Assistant Conservator of Forests, and Maung We, Ranger.	.....	Thônzè ..	Kadin-Bilin Working circle.	Compartment No. 49	361	
					Compartment No. 50	320	
					Compartment No. 59	318	
					Compartment No. 61 (part)	624	
					Compartment No. 62 (part)	377	
					Total Kadin-Bilin ...	2,000	
	Mr E. P. Popert, Conservator of Forests, Mr. G. Q. Corbett, Assistant Conservator, of Forests, and Maung We, Forest Ranger.	.....	Thônze ...	Môkka Working circle.	Compartment No. 43 (part)	60	
					Compartment No. 23	64	
					Compartment No. 24	76	
					Total Môkka ...	200	
					Total Tharrawaddy ...	2,993	

PEGU CIRCLE—concluded.

Statement of Teak Trees girdled during the season 1888-89—concluded.

Division.	Girdling officer.	Revising officer.	Range.	Forest district.	Locality.	Number of teak trees girdled.	Remarks.
					Brought forward ...	...	
Rangoon.	.....	Major C. T. Bingham, Deputy Conservator of Forests.	Pegu ...	Pegu	Kudat reserve, Kyunwi chaung	1,000	
					North Zamayi reserve	...	
					Karen area No. 1, Theme chaung forest	500	
					Total ...	1,500	
Toungoo.	Maung Chit Su, Forest Ranger.	Mr. J. Nisbet, Deputy Conservator of Forests.	Zayawadi	Kogwachaung forest.	Between Myaunggyi and Kogwa chaungs ...	433	
					Between Kogwa taung and Kogwa myauk chaungs	284	
					Between Kogwa chaung and Kywemathè chaung...	367	
	....	.....	Zayawadi	Myaunggyi chaung forest.	Between Myaunggyi and Natyadwin chaungs ...	711	
	.....	.....	Zayawadi	Natyadwin forest	Between Natyadwin chaung and Karen Thwathalan.	115	
					Between two Natyadwin chaungs	36	
					South of Natyadwin chaung and road to east of Kyaungbain forest.	300	
					Natyadwin and crossed road to west of Kyaungbain forest.	236	
	. ..	.....	Zayawadi	Kywemathè chaung.	Below Natyadwin chaung and crossed road east of Kogwa and Natyadwin.	280	
					Above Kywemathè chaung, between Kyauk chaung and Kyatgyi myaung.	339	
					Below Kywemathè chaung and north of Kyatgyi-myaung.	39	
					Total ...	3,509	Over 30 per cent.
	Maung Hmin Forest Ranger,	Mr. J. Nisbet, Deputy Conservator of Forests.	Bônmadi	Bônmadi forest	North of Ma-udaing chaung in the Indainggôn forest.	70	
					East of Ma udaing chaung and Northern Kyaw ...	30	
					Feeder of the Ma-udaing chaung	25	
					Source of Ma-udaing Chaung	20	
					Northern Kyaw of the Ma-udaing forest ...	189	
					Northern Kyaw of the Thebyu chaung ...	55	
					Feeder of the Thebyu chaung	70	
					West of Taunggyi and Northern Kyaw ...	40	
					Northern Kyaw of the Taunggyi	90	
					West of Taunggyi and Southern Kyaw ...	100	
					Eastern Kyaw of the Taunggyi	100	
					West of Taunggyi and Southern Kyaw	80	
					East of Bônmadi taung and Northern Kyaw ...	95	
					Western Kyaw of the Bônmadi taung	250	
	.....	Mr. J. Nisbet, Deputy Conservator of Forests.	Bônmadi	Yaukthawa forest	West of Mètindain chaung and Southern Kyaw of the Kywanbinzi shauk.	89	
					Feeder of the Mètindain chaung and Western Kyaw.	500	
					Feeder of the Mètindain and Eastern Kyaw ...	200	
					Southern Kyaw of the Mètindain chaung ...	57	
					Between feeders of the Mètindain and Subôk chaung.	120	
					Between Mètindain and Subôk chaungs ...	200	
					Eastern Kyaw of the Subôk chaung	122	
					Between Subôk chaung and feeder of the Thapan chaung.	40	
					Between Thapan chaung and Subôk chaung ...	17	
					Total ...	2,509	Over 36 per cent. in places
	Maung Yaing, Forest Ranger.	Mr. J. Nisbet, Deputy Conservator of Forests.	Thagaya. .	Saing forest ...	Saing forest, Karenlègyin kwin, between boundary of Saing-Yenè reserve and west of Yenè chaung.	80	
					Karenlègyin kwin, between boundary of Saing-Yenè reserve and east of Yenè chaung.	17	
					Between Yenè chaung and Sathamyaung ...	7	
					Total ...	104	
	Maung Yaing, Forest Ranger.	Mr. J. Nisbet, Deputy Conservator of Forests.	Thagaya	Saing forest, Myohla.	South and north of Mezalè chaung	86	
					South of Daunglangya chaung	46	
					Between Daunglangya and Gwè chaung, and Gwè chaung and Kinbyun chaung.	494	
					Between Gwè chaung and Chinbaung chaung ...	91	
					North of Chinbaung chaung up to railway line ...	36	
					Total ...	753	Over 40 per cent.
					Total Toungoo ...	6,875	
Shwegyin.	.....	Mr. C. H. Hobart-Hampden.	.....	.....	Baingda and Mayan chaungs	600	Girdled.
					Total Pegu Circle ...	14,324	

APPENDIX E.

Statement of Outturn of Foreign Timber for the five years 1884-85 to 1888-89.

Name of Foreign State.	1884-85.						1885-86.						1886-87.					
	Full-sized.	Tons.	Under-sized.	Tons.	Stem.	Tons.	Full-sized.	Tons.	Under-sized.	Tons.	Stem.	Tons.	Full-sized.	Tons.	Under-sized.	Tons.	Stem.	Tons.
Karenni	86,099	76,186	10,167	6,200	7,135	3,600	69,413	65,960	2,357	1,415	4,002	3,000	54,161	54,000	7,896	6,200	2,022	1,213
Mèhan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyaingtaung	9,822	8,455	861	516	3,766	1,506	9,271	8,577	826	500	1,388	1,000	5,209	4,800	763	600	822	493
Mainglòngyi	15,752	15,000	197	105	2,660	1,454	10,730	10,608	281	130	1,502	990	9,462	9,300	1,334	1,300	580	380
Thaungyin	24,460	21,771	9,010	5,400	21,436	8,780	10,533	9,768	2,177	1,400	5,182	2,600	16,717	16,000	17,507	13,000	1,347	800
Dagwin	5,641	6,000	4,496	2,970	328	160	3,885	4,067	1,199	1,000	72	50	1,454	1,500	457	400	19	12
Zimmè	...	...	...	...	...	...	3,469	3,145	713	500	1,106	650	11,165	10,100	1,183	900	1,210	605
Mehaungthun	...	...	...	...	...	...	1,444	1,473	109	80	443	280	18,795	17,600	1,696	1,400	204	125
Mònpè	...	...	...	...	...	...	8	6	...	...	...	...	...	...	...	...	...	...
Upper Thaungyin	...	...	...	...	...	...	...	...	...	...	...	...	220	200	37	20	...	...
GRAND TOTAL ...	141,774	127,412	24,731	15,191	35,323	15,500	108,753	103,504	7,663	5,025	13,695	8,570	117,183	113,500	30,803	23,820	6,204	3,628

Statement of Outturn of Foreign Timber for the five years 1884-85 to 1888-89—concluded.

Name of Foreign State.	1887-88.						1888-89.						Comparison of percentage of increase or decrease as compared with percentage of increase or decrease for the previous year.				
	Full-sized.	Tons.	Under-sized.	Tons.	Stem.	Tons.	Full-sized.	Tons.	Under-sized.	Tons.	Stem.	Tons.		1887-88. Increase per cent.	1887-88. Decrease per cent.	1888-89. Increase per cent.	1888-89. Decrease per cent.
Karenni	50,073	45,600	4,163	2,900	1,220	710	66,358	67,300	6,400	6,000	1,387	700	Karenni ... ... Full-sized	...	8	53	...
													Under-sized	...	47	54	...
													Stem	...	40	...	1
Mèhan	...	...	...	...	...	...	935	930	...	...	13	6	Mèhan ... ... This forest has not been shown separately in previous years, hence no comparison of increase or decrease can be arrived at.				
Kyaingtaung	4,280	4,200	388	271	384	200	6,365	6,200	866	700	1,210	600	Kyaingtaung ... Full-sized	...	18	49	...
													Under-sized	...	49	123	...
													Stem	...	53	215	...
Mainglòngyi	12,508	12,500	1,781	1,400	253	126	15,049	16,300	1,333	1,200	852	500	Mainglòngyi ... Full-sized	32	...	20	...
													Under-sized	34	...	...	25
													Stem	...	56	237	...
Thaungyin	15,242	14,500	10,607	7,500	2,931	1,500	11,067	11,200	8,582	8,300	870	500	Thaungyin ... Full-sized	..	9	...	27
													Under-sized	..	39	...	19
													Stem	118	...	...	70
Dagwin	1,829	1,800	1,563	940	29	16	480	600	627	600	38	20	Dagwin ... ... Full-sized	26	...	...	73
													Under-sized	242	...	...	59
													Stem	53	...	31	...
Zimmè	7,274	7,277	1,009	620	903	460	4,323	4,400	343	300	250	130	Zimmè ... ... Full-sized	...	35	...	41
													Under-sized	...	15	...	66
													Stem	...	25	...	72
Menaungthun	2,330	2,050	161	100	24	13	7,893	8,900	293	200	52	29	Mehaungthun ... Full-sized	...	88	238	...
													Under-size	...	91	88	...
													Stem	...	88	117	...
Mànpè	...	...	...	...	...	...	149	140	...	...	...	..	Not worked in 1887-88.				
Upper Thaungyin	...	...	...	...	...	...	....	...	...	...	...	...	Not worked in 1887-88 and 1888-89.				
Grand Total ...	93,542	87,927	19,672	13,731	5,744	3,025	112,639	115,970	18,444	17,300	4,672	2,485					

APPENDIX F.

Statement showing the Exports of Timber and other Forest Produce from Moulmein during the year 1888-89.

Articles and countries to which exported.		Quantity.	Value.
			Rs.
WOOD—			
Teak—			
To United Kingdom	Cubic tons	22,783	25,41,102
,, France, Bordeaux	,,	6	540
,, Italy, Spezzia	,,	736	73,630
,, Spain, Gibraltar	,,	4,185	5,52,774
,, Egypt, Port Said	,,	3,548	3,72,058
,, Ceylon	,,	617	37,501
,, Bengal, Calcutta	,,	24,270	17,96,747
,, Bengal, other ports	,,	414	30,602
,, Bombay, Bombay	,,	27,885	17,02,912
,, Madras, Madras	,,	295	22,804
,, Madras, other ports	,,	5,427	3,40,920
,, Provincial ports	,,	1,580	1,41,848
,, Karikal	,,	21	625
,, Pondicherry	,,	1,689	1,07,217
Total ...		93,405	77,21,819
Other Timber—			
To Malta	Tons	1	48
,, Ceylon	,,	½	9
,, Bengal, Calcutta	,,	1,254	63,692
,, Bombay, Bombay	,,	315	13,791
,, Madras, other ports	,,	322	7,454
,, Provincial ports	,,	718	20,948
,, Karikal	,,	5	100
,, Pondicherry	,,	36	1,087
Total ...		2,651½	1,07,129
Firewood—			
To Provincial ports	Tons	308	1,212
Sandal-wood—			
To Provincial ports		...	4
Teak Railway keys—			
To United Kingdom	Cwt.	2,728	6,204
,, Bengal, Calcutta	,,	4,396	8,505
,, Bombay, Bombay	,,	2,006	4,934
,, Provincial ports	,,	150	1,500
Total ...		9,880	21,143
WOOD—			
TEAK—			
Manufactures of—			
To France, Bordeaux		.....	477
,, France, St. Nazaire		.....	18
,, France, Marseilles		.....	20
,, Malta		.....	1,320
,, Egypt, Port Said		.....	2,007
,, Mauritius		.....	39,723
,, Ceylon		.....	11,008
,, Straits Settlements		.....	11,360
,, Bengal, Calcutta		.....	35,780
,, Bengal, other ports		.....	2,444
,, Madras, other ports		.....	308
,, Provincial ports		.....	72,273
Total ...		.....	1,77,732
LAC—			
Stick—			
To Provincial ports	Cwt.	15	310
OILS—			
Wood—			
To Bengal, Calcutta	Gallns.	728	374
,, Madras, Madras	,,	600	240
,, Madras, other ports	,,	1,542	642
,, Provincial ports	,,	592	284
Total ...		3,462	1,540

APPENDIX G.

Summary of Revenue of the different Divisions of the Tenasserim Circle during 1888-89.

Budget head—receipts.	Attaran.	Kado.	East Salween.	West Salween.	Tavoy.	Mergui.	Total.
I.—Timber and other Produce removed from the Forests by Government Agency—	Rs. A. P.	R. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
(a) Timber	51,999 13 2	1,504 8 0	2,56,327 3 0	1,54,247 10 0	17,664 5 1	.....	4,81,743 7 3
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos...	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....
II.—Timber and other Produce removed from the Forests by Consumers and Purchasers—							
(a) Timber	17,015 15 10	3,969 5 3	9,026 11 0	4,099 2 8	4,855 13 3	4,337 13 4	43,304 13 4
(b) Firewood and charcoal	164 8 0	6 0 0	.....	.....	.....	13 0 0	183 8 0
(c) Bamboos...	.....	.....	.....	.....	.....	.....	.....
(d) Grazing and fodder grass	.....	.....	.....	.....	.....	.....	.....
(e) Other minor produce	216 0 0	30 0 0	30 0 0	.....	739 0 0	1,076 0 0	2,091 0 0
III.—Confiscated Drift and Waif Wood	.....	79,580 3 0	.....	.....	244 13 4	5 0 0	79,830 0 4
IV.—Revenue from Forests not managed by Government							
(a) Duty on foreign timber and other forest produce	.....	41,252 1 0	.....	.....	.....	.....	41,252 1 0
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....
V.—Miscellaneous—							
(a) Fines and forfeitures	458 14 0	2,439 8 0	7 0 0	109 0 0	238 8 0	160 0 0	3,412 14 0
(b) Refunds	7 7 4	3 12 0	4 4 4	5 12 4	.....	.....	21 4 0
(c) Other sources	213 0 0	17,319 1 7	112 12 6	25 0 0	5 0 0	308 0 0	17,982 14 1
Total receipts ...	70,075 10 4	1,46,104 6 10	2,65,507 14 10	1,58,486 9 0	23,747 7 8	5,899 13 4	6,69,821 14 6

APPENDIX G.

Summary of Expenditure of the different Divisions of the Tenasserim Circle during 1888-89.

Budget head.	Attaran.	Kado.	East Salween.	West Salween.	Tavoy.	Mergui.	Total.
A.—CONSERVANCY AND WORKS.							
I.—Timber and other Produce removed from the Forests by Government Agency—	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
(a) Timber	19,845 5 7	773 7 0	1,10,937 4 11	72,021 7 10	15,444 8 0	.....	2,19,023 1 4
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....
II.—Timber and other Produce removed from the Forests by Consumers and Purchasers.	150 15 4	320 0 0	6 4 4	6 4 4	.....	.....	483 8 0
III.—Confiscated Drift and Waif Wood	.....	30,698 11 0	.....	.....	105 2 6	.....	30,803 13 6
IV.—Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	.....	6,378 4 3	.....	.....	.....	.....	6,378 4 3
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....
V.—Rent of Leased Forests and Payments to Shareholders in Forests managed by Government.	.....	.....	.....	.....	.....	.....	.....
VI.—Live-stock, Stores, Tools and Plant—							
(a) Purchase of cattle	1,827 1 4	.....	1,098 5 7	946 7 4	.....	.....	3,871 14 3
(b) Feed and keep of cattle	290 6 4	252 0 0	277 4 10	257 6 10	80 0 0	24 1 0	1,151 3 0
(c) Stores, tools, and plant	.....	.....	.....	.....	16 0 0	.....	16 0 0
VII.—Communications and Buildings—							
(a) Roads and bridges	450 4 8	168 8 8	355 9 9	1,664 2 7	4 4 3	11 15 6	2,654 13 5
(b) Buildings	.....	.....	.....	250 0 0	.....	.....	250 0 0
(c) Other works	.....	.....	.....	.....	.....	.....	.....
VIII.—Demarcation, Improvements, and Extension of Forests—							
(a) Demarcation	274 12 0	.....	177 13 0	38 10 0	64 5 4	.....	555 8 4
(b) Compensation for land and rights	.....	.....	.....	.....	.....	.....	.....
(c) Surveys and working plans	7 5 4	.....	7 5 4	7 5 4	.....	75 4 8	97 4 8
(d) Plantations	998 13 6	.....	1,676 14 0	6,080 9 1	.....	1,321 6 6	10,077 11 1
(e) Protection from fire	820 0 7	.....	2,195 6 1	2,237 1 6	.....	.....	5,252 8 2
(f) Other works	.....	69 8 0	.....	.....	149 2 9	19 5 0	237 15 9
IX.—Miscellaneous—							
(a) Refunds	.....	1,499 0 0	.....	.....	2,048 15 9	.....	3,537 15 9
(b) Law charges	.....	239 4 0	.....	.....	.....	.....	239 4 0
(c) Other charges	679 3 0	1,059 8 0	21 0 0	315 7 0	56 14 2	7 7 4	2,139 7 6
Total A.—Conservancy and works	24,844 3 8	41,448 2 11	1,16,753 3 10	83,824 13 10	17,939 4 9	1,459 8 0	2,86,269 5 0
B.—ESTABLISHMENTS.							
I.—Salaries—							
(a) Conservators	17,517 13 8	.....	.....	.....	.....	.....	17,517 13 8
(b) Superior officers	10,900 0 0	7,387 1 7	7,800 0 0	.....	2,100 0 0	700 0 0	28,787 1 7
(c) Subordinate forest and depôt establishments	2,632 4 1	6,601 15 6	2,909 11 10	1,971 11 10	1,477 0 0	1,310 8 3	16,893 3 6
(d) Office establishments	7,500 12 0	6,252 6 9	758 0 0	494 0 0	1,277 4 0	425 12 0	16,708 2 9
(e) Deputation and special allowances	.....	.....	.....	.....	.....	.....	.....
II.—Travelling Allowances—	690 8 0	.....	.....	.....	.....	.....	690 8 0
(a) Conservator	1,396 8 0	2,224 0 0	489 0 0	.....	149 14 0	617 11 9	4,887 1 9
(b) Superior officers	243 0 0	467 0 0	340 8 0	338 10 0	106 0 0	.....	1,485 2 0
(c) Subordinate forest and depôt establishments	85 6 0	.....	4 0 0	12 8 0	2 8 0	39 14 0	144 4 0
(d) Office establishments	.....	.....	.....	.....	.....	.....	.....
III.—Contingencies—							
(a) Stationery	.....	.....	.....	28 0 0	.....	.....	28 0 0
(b) Carriage of tents and records	.....	.....	.....	16 8 0	.....	.....	82 12 6
(c) Rents, rates, and taxes	14 9 0	35 3 6	16 8 0	.....	.....	.....	.....
(d) Pay of police guards	.....	.....	.....	.....	.....	.....	.....
(e) Official postage	45 14 6	60 6 0	25 0 6	24 12 6	15 0 0	5 0 0	196 1 6
(f) Sundries	274 10 8	72 8 0	139 3 9	124 3 7	20 4 2	8 9 10	639 8 0
Total B.—Establishments	41,341 5 11	23,199 4 4	12,472 0 1	3,000 5 11	5,147 14 2	3,107 7 10	88,260 11 3
Grand Total Expenditure	66,185 9 7	64,638 12 3	1,29,225 3 11	86,825 3 9	23,087 2 11	4,566 15 10	3,74,529 0 3

APPENDIX H.

TENASSERIM CIRCLE.

Number of Logs Imported by the Principal Thitgaungs during the year 1888-89.

No.	Name.	Number of logs.
1	Ko Taw A ...	17,628
2	Ko Lu Galè ...	9,310
3	Ko Kyè ...	7,296
4	Ko Mo ...	5,773
5	Kyaungtaga Kyan	3,289
6	Kyaungtaga Kyaing	3,217
7	Ko Ôn ...	3,185
8	Maung Tha Aung	2,835
9	Ko Nga Ôk	2,800
10	Maung Tha Nyin	2,409
11	Maung Pan	2,167
12	Kyaungtaga Kyè	2,005
13	Ko Nyeik ...	1,806
14	Ko Pôn	1,776
15	Ko Po O	1,591
16	Ko Shwe Lwè	1,494
17	Ko San Thu	14,65
18	P. W. J. Williams	1,447

APPENDIX I.

TENASSERIM CIRCLE.

List showing the names of the Principal Exporters of Teak from the 1st April 1888 to the 1st March 1889.

Name of firm.	Tons.	Remarks.
Messrs. The Bombay Burma Trading Corporation, Limited	24,942	There were in all 97,694 tons of timber shipped from this port by Government, petty shippers, Chettiès, &c.
Messrs. W. Strang, Steel and Co.	13,567	
Messrs. T. D. Findlay, Bodeker and Co.	11,547	
Messrs. Ferdinand, Foucar and Co.	8,725	
Babu Bhugwan Dass	9,661	
Babu Hullab Dass	4,886	
Babu Memraj	2,912	
Messrs. Krüger and Co.	2,521	
Messrs. Abdul Majid Brothers and Co.	1,613	
Babu H. Rukmmand	1,586	
Messrs. Limouzin and Co.	1,279	

APPENDIX J.

TENASSERIM CIRCLE.

Statement showing the Sale Prices of Teak Timber at Home during each month of the official year 1888-89.

Month.		Sale price of timber per ton (average).		Freight per ton.	Remarks.
		From	To		
		£ s. d.	£ s. d.	£ s. d.	
April	1888	9 10 0	10 0 0	0 40 0	
May	,, ...	9 10 0	10 0 0	0 40 0	
June	,, ...	9 10 0	10 0 0	0 40 0	
July	,, ...	9 10 0	10 0 0	0 40 0	
August	,, ...	11 0 0	12 10 0	0 42 6	
September	,, ...	11 0 0	12 10 0	0 45 0	
October	,, ...	11 0 0	12 10 0	0 45 0	
November	,, ...	11 0 0	12 10 0	0 47 6	
December	,, ...	11 0 0	12 10 0	0 47 6	
January	1889	11 0 0	12 10 0	0 47 6	
February	,, ...	11 0 0	12 10 0	0 47 6	
March	,, ...	11 0 0	12 10 0	0 47 6	

APPENDIX J(1).

TENASSERIM CIRCLE.

Statement showing the Market Rate of Teak Timber in the Indian Market for the year 1888-89.

Month.	Bombay.				Calcutta.				Remarks
	Squares.		Scantlings.		Squares.		Scantlings.		
	From	To	From	To	From	To	From	To	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
April 1888	70	80	90	100	60	80	75	85	There has been very little fluctuation in values during the year. The advance during the latter part is due entirely to the increase in freight.
May ,, ...	70	80	75	90	60	80	75	85	
June ,, ...	70	80	75	90	65	80	75	85	
July ,, ...	70	80	75	90	65	90	80	85	
August ,, ...	70	80	80	90	65	90	80	85	
September ,, ...	75	85	80	90	65	90	80	85	
October ,, ...	75	85	80	90	65	90	80	90	
November ,, ...	75	85	80	90	65	90	85	90	
December ,, ...	75	85	80	90	65	90	85	90	
January 1889	85	90	90	100	65	90	85	90	
February ,, ...	85	90	90	100	65	90	85	90	
March ,, ...	85	90	90	100	65	90	85	50	

APPENDIX K.

PEGU CIRCLE.

Selling Rates in the Home Market for 1888-89—Churchill and Sims.

		£	s.	d.		£	s.	d.
April	1888	8	0	0	to	13	0	0
May	,, ...	8	0	0	to	13	0	0
June	,, ...	8	0	0	to	13	0	0
July	,, ...	8	0	0	to	13	0	0
August	,, ...	8	0	0	to	13	0	0
September	,, ...	9	0	0	to	14	0	0
October	,, ...	9	0	0	to	14	0	0
November	,, ...	9	0	0	to	14	0	0
December	,, ...	9	0	0	to	14	0	0
January	1889	9	0	0	to	14	0	0
February	,, ...	9	0	0	to	14	0	0
March	,, ...	9	0	0	to	14	0	0

APPENDIX L.

PEGU CIRCLE.

Annual Return of Jungle Woods and Bamboos passed at the Government Timber Depôt and Pazundaung Revenue Station from 1st April 1888 to 31st March 1889.

Description of timber.		Logs.	Total.	Remarks.
Logs ...	In	791		Sold in the market at Rs. A. P. 15 5 0
	Pyinkado	986		Ditto 5 9 9
	Taukyan	1,058		Ditto 5 1 4 } per log.
	Thayet	64		Ditto 3 6 6
	Firewood	22	2,921	Ditto 1 5 0
Bamboos ...	Myin	817,300		Sold in the market at Rs. A. P. 160 14 10 to 220 5 0
	Kyathaung	357,000		Ditto 360 12 8 to 495 13 4 } per 10,000
	Tin	110,300		Ditto 337 8 0 to 425 0 0
	Talagu	4,000	1,288,600	Ditto 300 0 0 to 400 0 0
	GRAND TOTAL ...	...	1,291,521	

APPENDIX M.

PEGU CIRCLE.

Averages of Sales at the Rangoon Central Depôt, 1888-89.

		Rs.	A.	P.
April	1888	43	8	11
May	,, ...	45	15	5
June	,, ...	45	5	11
July	,, ...	49	10	3
August	,, ...	48	13	7
September	,, ...	47	12	9
October	,, ...	45	6	6
November	,, ...	...	...	...
December	,, ...	61	6	10
January	1889	...	...	...
February	,, ...	54	2	10
March	,, ...	50	14	0

APPENDIX N.

Division	Balance on 1st April 1868.				Arrivals during the year.				Sales and disposals during the year.				Balance on 31st March 1869.			
	Logs.				*Logs and scantlings.*				*Logs and scantlings.*				*Logs.*			
	Teak.	Teak drift.	Other woods.	Other woods, drift.	Teak	Teak drift.	Other woods.	Other woods, drift.	Teak.	Teak drift.	Other woods.	Other woods, drift.	Teak.	Teak drift.	Other woods.	Other woods, drift.
Prome	1,431	70	...	...	896	...	...	...	1,506	70*	...	...	821	...	...	...
Tharrawaddy	10,914	...	...	...	13,338	147	...	...	13,969	144	...	...	10,283	3	...	...
Rangoon	5,353	...	...	...	5,877	748	4	5	5,764	748	...	5	5,666	...	4	...
Toungoo	1,287	...	...	...	6,726	..	...	...	5,834	...	...	...	2,179	...	...	...
Shwegyin	58	...	...	...	311	...	...	...	285	...	...	..	84	...	...	...
Agency	44	41		...	...	539	...	6	...	525	..	6	44	55	...	...
Western	...	...	...	...	...	50	...	1	...	50	...	1	...	...	...	...
Total ..	19,243 44†	111	..	...	27,148	1,484	4	12	27,358	1,537	...	12	19,033 44†	58	4	...

† Sleepers. | * Confiscated.

APPENDIX O.

Division.	How extracted.	Teak.	Other reserved trees.	Unreserved trees.		Cutch.	Charcoal.	Wood-oil and resin.	Shaw bark.	Thatch.	Fuel.	Cheroot leaves.	Honey.	Cattle grazed.	Bamboos.	Canes.
				Logs.	Posts and poles.											
		Tons.	Tons.	Tons.	Tons.	1,000 viss.	100 baskets.	Viss.	100 viss.	Bundles.	Cart-loads.	Viss.	Viss.	Head.	Mille.	No.
Prome	By Government agency	1,239	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	658	...	17,969	3,370	3,223	219	31,800	49	200	...	...	...	...	...	...
	„ free grants	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tharrawaddy.	„ Government agency	23,929	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	426	83	6,514	49	660	635	6,000	32	700	110	15,750	260	250	823	...
	„ free grants	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ right-holders	...	...	...	...	...	...	...	8	7,750	...	...	...	1,598	32	200
Rangoon	„ Government agency	6,456	260	12	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	...	490	15,715	1,283	...	3	128	126	350	...	...	...	308	1,083	400
	„ free grants	6	15	...	...	...	...	...	...	...	...	...	...	...	...	...
Toungoo	„ Government agency	9,556	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	222	497	8,144	883	45	71	25,400	9	...	546	...	200	...	70	370
	„ free grants	6	22	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ right-holders	...	...	199	...	...	...	...	...	...	535	...	...	116	6	...
Shwegyin	„ Government agency	412	493	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	40	1,940	6,438	1,346	...	205	1,160	...	...	...	...	...	...	13	...
	„ free grants	...	20	...	...	...	...	...	...	...	...	...	...	...	...	...
Western	„ Government agency	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	„ purchasers	95	244	19,090	9,858	72	123	40	...	...	...	...	...	...	...	...
	„ free grants	40	80	...	...	...	...	...	...	...	...	...	...	...	...	...
Agency ...	„ purchasers	...	...	...	170	...	...	...	...	...	...	...	...	...	...	...
	Total ...	43,174	4,144	74,101	16,962	4,000	1,256	64,528	224	9,000	1,181	15,750	460	2,274	2,037	970